

NEW WORLDS SCIENCE FICTION

No. 36

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NEW WORLDS

— PROFILES —

H. L. Gold

New York, U.S.A.



Well-known for his forthright policy as editor of America's *Galaxy Science Fiction* magazine, 41-year old Canadian-born Horace L. Gold is just as popular as an author, his first published story having appeared as far back as 1934. "Now," he says, "over five million words later, I am still busy learning." Educated in the States, he had a variety of jobs while learning to write including shoe salesman, junior pharmacist, busboy, and for a brief interlude during the depression period a 'drowning man' on New York beaches. This was to enable the life-saving guards to effect rescues and thus retain their jobs and ended rather rapidly "when one guard laid open his head diving off his catamaran after me and I had to pull him in."

He has lost count of the number of magazines he has edited during his literary career, they number more than two dozen, but *Galaxy* is the dream he held since his first editorial position in 1939. His attractive wife Evelyn Page, a former celebrated stage dancer, is Managing Editor of his magazine. They have one son and live in an apartment in downtown Manhattan which is quite a focal point for visitors.

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World Convention for London ?

Britain's annual science fiction Convention, held this year over the Easter vacation at the George Hotel, Kettering, Northamptonshire (70 miles from London and centrally situated for visiting delegates in the Midlands and North) was as great a social success as the 1954 one at Manchester, although fewer people attended this year and the business sessions were even less organised than in previous years. Nevertheless, the ultra-modern decor of the hotel, which was completely taken over by the conventioners for the three-day meeting, plus the wholeheartedly co-operation of the hotel manager and his staff, produced a holiday atmosphere of good will and high spirits which would be difficult to surpass in any of the local or national American conventions, long noted for their fraternal gatherings.

In point of fact, Kettering was voted *the* convention site for future years but was not chosen for next year owing to the possibility of Britain holding an official World Convention. The major item on the agenda was the proposition that Britain placed a bid at this year's national American convention to be held in Cleveland, Ohio, for London to be the venue for the 1956 World Convention. Should the bid be successful it would be the first time the "World" Convention will have been held outside the United States. Primarily, however, the yearly American Convention is a domestic affair, although many Canadian delegates attend and at least three British and one Japanese have been visitors in recent years, and there is likely to be considerable opposition to the motion especially from groups in the Middle West and West who would be from five to six thousand miles away from the London Convention site.

However, the proposition is one that has been fostered by many Americans during the past two years, the spark having been applied when editor H. J. Campbell of *Authentic* attended the 1953 World Convention in Philadelphia and put in a surprise bid for Britain to be the 1954 site. Although the bid failed—the honour going to San Francisco—some 56 votes were registered in favour of our own country. Since then many prominent Americans, both professional and amateur, have expressed a willingness to support a British bid.

There is a strong additional motive in Britain bidding for next year's World site in view of the fact that an official British representative will be attending Cleveland in September and will be able to direct the necessary propaganda towards a favourable viewpoint for London.

At the moment the delegate's name is not known as national voting throughout the various British fan groups and organisations will not be finalised until after this editorial goes to press, but only three nominees remain upon the 'short list.'

The sponsoring scheme which will enable one of these delegates to attend Cleveland (known as the Trans-Atlantic Fan Fund), was devised some three years ago by Don Ford of Ohio, who was one of the leading organisers of the 1949 World Convention in Cincinnati. The ultimate objective of the scheme being that each year either a British delegate visits U.S.A. or an American delegate visits Britain. Such a scheme has needed continual support from both sides of the Atlantic and has taken longer to organise than expected but is now nearing its first objective.

The delegates at Kettering discussed the many problems involved should Britain be responsible for the 1956 World Convention and finally voted unanimously for the proposition, it being pointed out that London adequately coped with organising the 1951 European Convention at which seven countries were represented. A sub-Committee was then formed on the spot from which a national "shadow Committee" will be built up to handle all advance details on the assumption that Britain will be successful at Cleveland—leaving such matters until after the American Convention would not leave sufficient time to fully organise our potential resources.

The suggested date, should Britain be successful, was Easter (March 30-31, April 1-2), giving visiting Americans the opportunity of lower travel rates during the off-season. The venue—undecided as yet—a hotel to be taken over completely, or one wing of one of London's larger hotels.

What can we assume this far in advance of the final decision at Cleveland? We can rely upon the professional support of all the British writers and magazine publishers; we are already assured of the wholehearted support of the twenty-five book publishers in London who are closely interested in the field; on the professional side there are innumerable links between the press, radio and T.V., and the film world—publicity would be comparatively simple.

One thing is very clear, however, if the World Convention comes to London next year, the daytime business sessions will have to be carefully planned so as to appeal to the *general reader* probably visiting for the first time and to enable the press to write sensible and serious accounts of the proceedings. The report and photograph published in the local Kettering newspaper is something I don't like to think about.

John Carnell

In New Worlds No. 34 Mr. McIntosh discussed the apparent difference between the pre- and post-1950 presentation of science fiction plots. The following story obviously fits his Class II theme and is the more fascinating because it relies almost entirely upon conversation to carry the various deductions inferred to a logical conclusion.

BLUEBIRD WORLD

By J. T. McIntosh

Illustrated by WOODWARD

I.

The two girls standing in the shade of the tall firs were rather similar in appearance. They were both tall; both brunettes, both about twenty-four, and they were similarly dressed in transparent plastic flying overalls with white suits underneath.

But there was one notable, perceptible difference between them, more important than the fact that Syl was much prettier than Babs.

Babs was happy. Syl wasn't.

They were alone in the middle of the Highland Reserve, which meant that the nearest house or building was about a hundred miles away.

"But why?" Babs insisted, laughing. "Of course I'll do anything within reason, Syl, but this is crazy. You want me to pretend you tried to kill me. Why, Syl, why? What possible reason can you have for—"

"I want to see what happens," said Syl.



Babs furrowed her brow in puzzlement. "But nothing will happen. What could?"

"I don't believe nothing will happen," said Syl angrily.

Babs stared at her. "Then you believe something will."

"I don't know."

"But—"

"I don't know, I tell you! But there must be some limit. Otherwise what's to stop me killing anybody I don't like?"

Babs burst out laughing. She put an arm round Syl's shoulder to support herself. "What's to stop you?" she said at last. "The same thing that stops you cutting off your own arms and legs—you don't really want to."

Syl shook off Bab's arm. "I didn't say I wanted to kill people," she said. "But I *could*. That's what's different about me. You, or Greg, or anyone else just wouldn't be capable of murder. *I'm* capable of it."

Babs stopped smiling. "I suppose you are, Syl," she said soberly. "You've always been different. Perhaps that's what Greg likes about you."

Syl frowned. She didn't want to talk about Greg. "The point is," she said impatiently, "are you going to do it?"

"No," said Babs. "Even if I did, Syl, it wouldn't work. People just wouldn't believe you'd really meant to kill me."

Syl stared at her. "Of course they would . . . what do you mean?"

"They'd believe me if I told the truth. I don't think I could lie, Syl. If I tried, I wouldn't be very convincing. Sorry."

Syl clenched her hands until her nails almost cut the skin. She could *make* Babs play her part. She felt a wild impulse to knock Babs down, to tear her hair and scratch her face.

But it wouldn't do any good, for if Babs told anyone about it she would tell the whole story and it would be clear that Syl was only experimenting and had never meant Babs any serious harm. As Babs said, nothing would happen. The authority, the control, the forces of law and order that there simply must be somewhere in this serene contented world would ignore the incident and Syl would learn nothing.

"I still say," Babs observed, "if you want to know anything you should go to the Specialists."

"Specialists are only people who write books," retorted Syl moodily, "I've read the books. What I'm looking for isn't in books."

"What are you looking for, Syl?"

"How should I know?" Syl flared at her. "Oh well," she went on more calmly, "if you won't, you won't. Let's go back."

"Syl," said Babs insistently, "how are things between you and . . . Greg?"

"We're still engaged," said Syl gloomily. "I think."

Babs nodded. Babs couldn't be really unhappy; unlike Syl, only Syl, she didn't know how. But the nearest thing to unhappiness in her life was the knowledge that Syl, who didn't care about Greg a tenth as much as Babs did, was Greg's first choice, past, present and future.

The two girls standing in the shade of the tall firs were not in the least similar this time. In fact, they were the traditional rivals and opposites, Syl tall, lean, brunette and regal, Dorothy small, soft, blonde and cuddlesome.

Nevertheless, Dorothy and Babs had something in common. Dorothy was obviously serenely, gloriously happy. And Syl, as ever, was . . . Syl.

"You know my name?" Syl asked abruptly. "And where I live?"

"Yes, you're Syl Douglas," said Dorothy wonderingly. "You live in Kent somewhere."

They were at the spot to which Syl had brought Babs, a glen among the mountains of the north of Scotland—the only wild life reserve in Britain, which now had a population of over two hundred million.

"Near Maston," said Syl, nodding. "Syl is for Sylvia, of course—Sylvia Edana Douglas. Remember that, Dorothy."

"But why?" asked Dorothy.

"I don't want there to be any doubt at all—afterwards."

Syl stepped forward, and hesitated. For a moment she thought she wasn't going to be able to go through with it. There was no doubt this was crazy, as Babs had said. Syl had nothing against Dorothy, no more than she had had against Babs. But she had to *know*, and if people wouldn't play their part willingly in helping her to find out, they would just have to play it unwillingly.

Her battle with herself over, Syl hit Dorothy savagely under the heart. Dorothy shot back with a scream of pain and sheer disbelief.

Syl was on her at once, tearing the belt that held Dorothy's propulsion unit from her and smashing it on a stone until it cracked and was useless. Then she ripped the wrist radio from Dorothy's arm and sent it flying into the bushes. Dorothy couldn't do anything about it except scream incoherently and attempt uselessly to fend Syl off with her hands.

Syl ran for her plane. Behind her, Dorothy screamed. "You can't go without me, Syl! Syl! How can I . . .?"

Syl took off without a glance back.

Dorothy would find the wrist radio eventually though it would take her a long time. It would look as if Syl hadn't intended her to find it—and leaving Dorothy there alone, without a propulsion unit or a wrist radio, without a map, without any means of finding her way out of the vast, wild, trackless Reserve, would be murder, as near as made no difference.

There were people who might find their way out of the Reserve before they starved, but Dorothy certainly wasn't one of them.

Without actually killing someone, Syl couldn't stage a much more convincing attempted murder.

Quelling her qualms about what she had done to Dorothy, whom she hardly knew and who had never done her any harm, Syl let fierce satisfaction flood her. If there was any law, any rule, any order in the world, that couldn't be ignored. Soon she would know what she had been trying for years to find out.

Days passed. A week. Two weeks.

Syl waited for something to happen, and nothing did. Nothing ever did. Was there really nothing—nothing to stop her taking the whole world if she wanted it?

The attack on Dorothy had been bad enough, and it must look a lot worse than it was. Yet apparently no one cared. No one was interested.

True, nobody else wanted to commit crimes. No one else seemed capable of it.

Greg and all the other people she knew never experienced the wild impulses that sometimes flooded her. She knew that. Greg had sometimes said he'd like to wring her neck, but that was only a figure of speech.

No law, no control was needed for people like Greg and Babs. But she existed. She, Syl Douglas, was a fact, and so were her rages, her occasional desire to hurt, her selfishness, her covetousness, her fits of depression, her irrational dislikes. There must be something to deal with her.

Since she existed, others like her could exist, and probably had existed in the ten centuries of the present civilization. Why hadn't they killed and tortured their way to supreme power?

There were hints, no more, that people like her *had* existed. Occasionally, in some book or other, she would come across a brief reference to a disturbed, turbulent personality. But nothing much had ever come of it, apparently.

Therefore there must be some check on people like herself, something or someone that limited or destroyed them. There must be some law and people to administer it.

Syl wanted to find this Law, this control, this check, this punishment, this warning, whatever it was. She wanted it out in the open, not dogging her steps like a shadow.

So she tried once more to find it.

She couldn't bring herself to commit the most hideous crime she could think of, merely to find out what there was to stop her doing it. She didn't want to kill someone or destroy a great work of art or poison a water supply. In her attack on Dorothy she had gone quite as far as she wanted to go against an individual, and nothing had come of it.

Instead, she went to a famous art gallery and stole a dozen of the greatest paintings in the world. She cut them out of their frames, very carefully, rolled them up under her arm and walked out with them. She left a note giving her name and saying she had taken the paintings.

A week later a man called to see her. He gave his name—Norman Grassick. He was a tall, thin man, athletic enough, but with the pale skin of one who spent most of his time indoors.

"I look after the Youngson Gallery, Miss Douglas," he told her, "I wondered if you'd finished with the paintings you took the other day. Can I have them back?"

"No," said Syl.

"They're not supposed to be removed, Miss Douglas," Grassick pursued. "We'd really like them back at the gallery. If you'd tell us . . ."

Clearly he was at sea. He didn't know what to say to her.

"I'm not going to give them back," said Syl. "Does that make the situation clear?"

"No," said Grassick, bewildered. "Why should you do this? Those paintings are the property of the whole world. They belong to everybody."

"Now they belong to me."

"I don't understand . . . Yes I do. This is some sort of joke? Or you're going to write a book? Or—"

"I just want to see what you do. How you get the paintings back."

"But how on earth can I get them back if you don't give them to me?" Grassick exclaimed.

"Suppose I destroy them?"

She expected him to become agitated at the idea, but he was merely more bewildered.

"I don't think you can be an artist, Miss Douglas," he said. "I suggest you consult someone who knows something about art. Someone who knows the worth of the pictures you took."

"I know their worth. That's why I took them."

"And you talk of destroying them?" he asked, puzzled.

Syl gave up. She could have carried the experiment on longer, but somehow she knew that no one was going to take the pictures from her. Others would call, asking her to give them back. People would explain patiently to her what great works of art they were, and why they should be on view to anyone who wanted to see them. Finally someone would suggest brightly that if she wouldn't give them back, she could hang them on the walls of her flat and let people come and look at them.

There was no Law here, no control. She hadn't found what she was looking for.

So she gave Grassick the paintings. He went away with them, still puzzled, but obviously telling himself that Syl was gathering material for a book and some day he would read it and the whole thing would become clear.

Syl dropped lightly to the pavement in front of the library. People turned to stare at her. Syl didn't notice the stares, for she had always been stared at. There had been a quality of difference about her even when she was a child.

Perhaps this difference was what Greg liked about her, as Babs said. Syl was thinking of Greg, reluctantly, as she went up the steps and into the gloom of the library. She thought of Greg a lot, and it was always reluctantly.

She managed to drive Greg from her mind with the promise that she would go and see him soon.

Babs Roper was the librarian. Only an intense love of books would make anyone take charge of a library voluntarily, as Babs had done. But there was always someone to do the essential jobs, like looking after libraries, recording current events and showing people how to work things.

"Hello, Syl," said Babs, with a smile. "What can I do for you—apart from pretending you tried to murder me?"

"I tried that with someone else," said Syl moodily. "It flopped. Suppose I go and see some Specialists. How do people become Specialists, anyway?"

Babs smiled again. "Specialists are just people with brains who are interested in things. Suppose you became particularly interested in anthropology, learned most of what's known already, dug around for more material, formed a new theory of evolution and wrote a book about it. If your book was any good, people would start talking about you as a Specialist. That's all."

"That's what I thought. So there isn't much chance of the Specialists knowing more than I can find in books anyway."

"Oh yes, they always know more than they write. Let's say someone is interested in Indian customs. He reads all that everyone else has written, and he studies Indian customs at first hand, in India. Some subject interests him particularly, and he decides to write a book on it. He gathers a tremendous amount of material, and uses only the best things, or the items that fit into the framework he decides to use—"

"I see," said Syl, becoming interested. "He does know more than he writes. And what he doesn't write may be what I want."

Babs nodded, refraining from remarking that she had been trying to tell Syl this for some time.

"Is there someone who knows more history than there is in all the books?" Syl demanded.

"I doubt it. But a Specialist would know the limits. I mean, he'd know what's known, and what isn't—what you'll be able to find in books and what you won't. And while he won't know everything, he'll know where to get everything."

"If you'd told me that before," said Syl bitterly, "I might have saved a lot of time."

Once more Babs refrained from pointing out that Syl had never given her the chance.

Most of the people who visited the library—not an enormous number, really, for only about three people in five could read—came in search of diversion, light fiction, picture books, books to tell them how to do a job. The others, the Specialists, always wanted the same kind of book. There were very few like Syl, who read avidly and widely and never seemed satisfied with all that was known about anything.

Babs got up, searched in a drawer and came back with a notebook. "I keep some addresses here," she said, "so that if anything new comes out on any subject, I can let the Specialists concerned know. What period of history do you want to know about?"

"All of it. But chiefly the first hundred years of history."

"Not before? Early history, not prehistory?"

"Both. They link up, don't they?"

Babs grinned. "You must know more about that than I do. Early history covers only a century or so, and prehistory covers umpteen million years. There's Edwin Rayson—early history. I'll write the address. And you might like to see John Sayers—I suppose you could call his speciality late prehistory. I could give you a whole lot of addresses Syl, but the Specialists themselves will be able to direct you far better than I can. See Rayson. He probably won't be the man you want, but he'll know who is."

Syl got up. "Thanks, Babs," she said

"Good luck," Babs called softly after her.

2.

Before she went to see Rayson, Syl called Greg by wrist radio. All she needed to do was switch it on and say the name. If anyone had the same name as anyone else, some small variant had to be used. Greg was simply Greg Calder, for example. If she said "Gregory Calder" or "G. Calder," or "Greg H. Calder" she would get three different people, none of them the one she wanted.

She called Greg from a sense of duty. Perhaps she should never have said she was going to marry him, for she had no immediate intention of marrying anyone—not till she knew a little more about herself and felt her life more settled, anyway.

Greg was always supremely calm and reasonable and imperturbable and absolutely right. It didn't annoy her that he was right, really; she even counted on it sometimes.

However, there was always this other thing. She and Greg would never fully understand each other. Perhaps some day she would meet

someone like herself, some man who had the same problems and could share them with her. She wanted to stay free in case she did. If she ever did, she would abandon Greg like a shot.

There wasn't much said over the radio. Greg, as ever, was glad to hear from her, but didn't try to force himself on her. He knew that she knew that when she was ready he would be waiting for her.

Having disposed of that Syl rose in the air and turned south. Rayson lived in Balham.

She could have landed on Rayson's balcony, on the forty-third floor, but considering that she had never met him that wouldn't be civil. She dropped to ground-level and entered the hall of the building.

Rayson's name was on the board all right. She stabbed the button, wondering what sort of line he had with casual visitors.

The little slip that came out didn't suggest that Rayson was over-fussy. All it asked was the visitor's name and "*What do you want to see me about?*" Syl noticed in passing that he apparently took it for granted that anyone who wanted to see him would be able to read.

Beside *Name* she wrote simply 'Syl Douglas,' and opposite *What do you want to see me about?* she wrote briefly: 'Year 1-100.' She put the slip in the Rayson chute and pressed the button again. The answer was back in less than a minute: '*Come right up.*'

She ran up the first four flights of steps. Syl liked to keep herself a little tougher than most people, and that meant exercise. But there was no need to overdo it. After four flights she stepped into the well and shot upwards on her flight unit.

Rayson received her in a room which contained nothing but micro-film slots, a scanner and two chairs. He didn't look old. However, she guessed he was seventy anyway, possibly much older.

"What can I do for you, Miss Douglas?" he asked politely.

"Syl," she said automatically. "You're a Specialist in early history, I understand."

He smiled. "I just happen to have found out all I could about the first century."

"Why?" Syl demanded.

Rayson looked at her keenly. "I think I can be of most help to you, Syl," he said slowly, "if you tell me *your* motives. Tell me why you want to know rather than what you want to know."

Syl, in turn, gave him a shrewd, steady glance. He had taken her at first to be just a pretty girl who had become fleetingly attracted to his subject, perhaps because some man had teased her about her ignorance. Already he had revised that idea. He was intelligent, observant and no hermit. Perhaps she wasn't wasting her time coming to him, after all.

"I want to find out about myself," she said.

"Very natural," he nodded. "And you think the information may be found in the first century?"

She could be sarcastic too. "By a process of elimination," she said, "it very well might. For it doesn't seem to be in the past nine hundred years or in prehistory."

He laughed. "The logic is impeccable," he admitted. "All right, Syl, fire ahead."

"My childhood was normal," she said, "until I was about ten. Then I began to realise that I was a vicious little savage, far more selfish and cruel and inconsiderate than any of my friends. Naturally, I didn't seem strange to myself. Everyone else seemed strange. I didn't wonder why I took everything I wanted. I wondered why no one else did."

"I'm beginning to understand already," said Rayson. His voice was suddenly sad. Syl looked at him sharply. "Go on please," he said. "You wouldn't want to hear guesses from me based on next to nothing."

"No one ever stopped me," Syl went on. "I felt that they should. I often did things expecting to be scolded, and of course I was, but only very mildly. I was told not to do things, with the apparent idea that I'd done them only through ignorance. People couldn't understand that I'd *meant* to annoy, or hurt, or steal.

"Then when I was fourteen there was a new thing. I couldn't bear to see boys with any other girl. I collected boys I didn't want just because I didn't want anyone else to have them. Those I couldn't take by being cleverer and prettier than the other girls I—well, I just took them."

Rayson nodded. He seemed to understand without much explanation.

"When I was about seventeen I began to get new ideas about this. Other people weren't like me, but I hadn't realised before that they were a lot happier than I was. They didn't take everything they wanted, and so they didn't *get* everything they wanted. They were considerate and helpful, and they weren't cruel. Yet they were happy. Oh, I don't say I was unhappy. I wasn't. But it seemed to me that everyone else was happier.

"For a year or two I tried to be like everyone else. I met a man I liked better than all the others, and said I'd marry him. We're still engaged.

"Since I met him I've been trying desperately to find out why I'm different. I've also been trying to find some authority, some government, some law that others may know about and I don't. I've been

trying to find something bigger and stronger than me. I've also been trying to find someone else like me. I've never found any of them."

She stopped and waited.

"It's not surprising that you didn't, Syl," said Rayson gently. "But you've found some of the answers now. Those that exist, that is."

Syl stared at him.

"I'm not the one to tell you about them. But I can tell you who is. Henry Wyman, Lipool. Go and see him and tell him exactly what you told me."

Syl was overjoyed, a little afraid and a little angry, all at once. "But you know!" she exclaimed. "Tell me!"

He shook his head.

"I could shake it out of you," said Syl fiercely.

"No you couldn't. I'd stop you."

Syl gasped. "You'd *what*?" she whispered, amazed.

"I'd fight back. And don't think I couldn't."

"But you're just what I've been looking for!" Syl exclaimed. "Someone who'll fight back! You've no idea how often I've done things, cruel things, wild things, just to see if anyone would take any notice—"

"You've been lucky," said Rayson casually. "Someone might have killed you."

Syl started to her feet. "Then there is government. There is law. There is organisation. You Specialists—yes, that's it! The Specialists are the law. The rulers. The—"

"No. You're wrong again, Syl. There are no rulers. Once there were such people, but we don't need them any more."

"But you said . . . someone might have killed me."

He ignored that completely. "I'll give you a note to Henry," he said. "Give it to him first, and it'll save you a lot of explanation. It's a letter—"

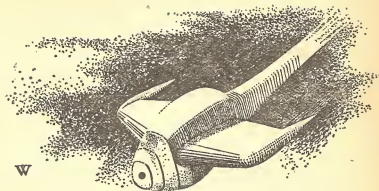
"Warning him to be careful, that I'm dangerous?"

"Yes," said Rayson blandly.

The year was 1027. A thousand years ago, then, something had happened. Nobody knew what. It wasn't the beginning of history, for history didn't really begin until about the year 100.

History was virtually non-existent in the first century, sparse and incomplete at the beginning of the second, and from about the middle of the second century detailed and exact.

It was well known that there had been civilizations, high civilizations, before even the first century. Some critics said that art and literature,



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to judge by what had survived, had been on a much higher level than had ever been reached since. Others pointed out that prehistoric art and literature and music came down without any dates assigned to it, and that it must represent the best creative work of thousands of years.

There were little poems by a man called Shakespeare, so histrionic that it was generally agreed they must have been speeches in plays, none of which had survived. There was such an enormous volume of music by Beethoven that it was concluded his entire works must have survived. Music, on the whole, came off well.

Compared with music, literature had obviously had a raw deal. No writer's works were complete—in fact, not a single item of any length was complete. There were bits of novels, bits of plays, bits of long poems. And there were complete poems, thousands of them, but none longer than a hundred lines or so.

Apart from music and literature, what was known in general about the prehistoric period was voluminous. What was known in particular was negligible.

Previous civilizations had been big and unwieldy, that much was known. There was evidence of vast administration. There had been a thing called law, a set of rules which everyone had to obey. There had been newspapers, a daily record of events all over the world. Everyone agreed that that, at least, was an excellent idea—but how had it been possible to get people to do the work involved?

Another excellent idea they had had in prehistoric times was organised transport and communication. True, the wrist radio was all that was really needed. Nevertheless, when you wanted something taken from, say, London to Paris, it would be very convenient simply to

hand it over to the Post Office, as the ancients had apparently done, instead of having to take it yourself in your own plane, or get a friend to take it.

However, there was probably a very good reason why all these things no longer existed. The world of 1027 wasn't worried about it. The world of 1027 wasn't worried about anything. It might not be an utterly perfect world but it was an utterly happy one.

Yes, utterly happy. Syl Douglas, among so many millions, was a mere statistical aberration.

Statistically, Syl Douglas didn't exist.

3.

Syl tried not to be excited on her way to see Henry Wyman, found it was impossible and gave up the attempt. He would undoubtedly be expecting her. Rayson had given her a letter which was supposed to introduce her, but if he believed she was dangerous, as he obviously did, he would have called Wyman by wrist radio to warn him she was coming to see him.

Lipool was too far away to fly on a propulsion unit, so Syl flew her plane. Flying it reminded her, once again, of Greg, who had built it for her.

She spent far too much time thinking of Greg, she told herself fiercely. It wasn't as if she were in love with him. She didn't need Greg.

She put all thought of Greg from her mind, deliberately.

She was still thirty miles from Lipool when her radio buzzed. She pressed the button and said, "Syl Douglas."

"Henry Wyman. You're on your way to see me, Miss Douglas?"

"Call me Syl. Yes, how do you know?"

"I can hear you're in a plane. You know your way?"

"When I land, you mean? Yes. Be with you in a few minutes. Got your gun ready?"

"Eh?"

"For self-defence. Didn't Rayson tell you I was dangerous?"

"No, as a matter of fact he told me you weren't. But with all due respect to Rayson, I'm not sure that he'd know. I will, though. Be seeing you, Syl."

He switched off.

Syl didn't know quite how to take that.

Wyman said: "I think I can be of most help to you, Syl, if you tell me right away all the worst things you've ever done in your life."

Syl was startled, but she rallied at once. "So that you'll know how dangerous I am?"

"Not exactly. So that I'll know how you rate in a class of people in which the ordinary rules don't apply."

"Then there are others like me?" said Syl excitedly.

"Of course. From one point of view everything in nature is unique. From another, nothing is. Anything nature does once, she's liable to do again—though perhaps not often, perhaps never exactly the same."

"Can you arrange for me to meet someone else like myself?"

"Let's leave that question aside for the moment, Syl. Tell me about yourself. And please be honest. I can tell you a lot, and if you hide things from me that'll only mean I won't be telling you the right things."

Syl took him at his word. She had liked him from the first, partly because he did seem to understand her better than most people did. He was as blunt as she was, and yet friendly in a paternal sort of way. She felt, too, that nothing she could do would ever surprise him.

He listened carefully, asking an occasional question. When she had told him all the important things about herself he pondered for a moment, then suddenly smiled.

"Rayson's right," he said. "You're not really dangerous, Syl. You want to hear about the others, the people like you. Well, the things they all have in common are that they're not as happy as the rest of us, they can't control themselves as we do, they're selfish and inconsiderate."

"But there are degrees. Some of these people have simply been wild animals, killers and would-be dictators. Others, like you, are just wild, headstrong people who like their own way and don't see why they shouldn't always get it."

"But why?" Syl demanded. "Why are we different?"

"I don't know. I should say you're throwbacks."

"We're what?"

"Throwbacks. In early prehistory human beings were the wildest, cruellest, most dangerous killers in the whole animal kingdom. But gradually it became possible for human beings to live together in comparative peace. Then came civilization."

"And eventually, though we don't know anything for certain about this, there must have been an evolutionary change. The emotions softened, apathy, grief and heavy sorrow disappeared, fear lightened, anger dropped to nothing more than occasional mild resentment, boredom only occurred in cases of extreme monotony."

Syl felt baffled and frustrated, not because of what he said but because he was speaking casually and yet with certainty of things which had puzzled her all her life.

"I wish I'd heard about this before," she exclaimed. "I've been afraid—really afraid, more than I've ever heard of anyone else being. I know what grief is, and I certainly know what rage is like. I'm angry now, hearing this only after years of wondering what was the matter with me. Why didn't someone tell me this?"

"People didn't tell you because they didn't know, Syl. I know only because I've studied these throwbacks, and met one or two."

"Others like me? Alive now? How many of them are there?"

"Probably about a score in the world at this moment."

"Then why have I never heard of them?"

"A matter of mathematics, Syl. Twenty throwbacks in the world at one time means two in Europe, one in the United States, one in South America, one in Canada, two in China, one in—"

"I see. There's not much chance of anyone I've ever known having met one, apart from me."

"Exactly."

"Have I got this straight?" Syl asked. "You think human beings evolved emotionally into something different—and I'm one of the rare cases of a person being born with the old emotional pattern?"

"Yes. That's the explanation I've come to accept for throwbacks, Syl. You might say their emotional scale is set below ours. When we're interested, they're bored. When we resent something, they're furious. When we regret something they're sunk in grief. And in circumstances bad enough to make us rather unhappy, they're in the depths of apathy."

"Pretty blue outlook for me, isn't it?" said Syl bleakly.

"Depends how you look at it. If I'm right, at one time everybody was like you, Syl. And no doubt they thought they were happy. They wouldn't have understood our outlook at all. They'd have thought we were mad, or lazy, or decadent or something."

Syl nodded. She could understand that.

"That's typical of most throwbacks," Wyman said slowly. "On the one hand, they look down on us, think we're inferior. On the other hand, they envy us and resent our permanent contentment."

Syl reddened. She had done that all her life.

Suddenly she felt she didn't want to hear any more.

She got up. "Well, thanks," she said brusquely. "I'm glad to know anyway. I'm a cave-woman, apparently, and if I'd been born in the right time my destiny would have been to be knocked on the head with a club and dragged away by the hair. I suppose I should be glad to live in this enlightened age instead."

"Sit down, Syl. There's still one or two things I can tell you."

"I'm not sure I want to hear them now."

"There's no need to be afraid, Syl," said Wyman gently.

Syl almost screamed: "I'm not—"

But honesty reasserted itself and she sat down again. Yes, she was afraid. She was terrified. She didn't know quite why, and that only made it worse.

"Try looking at your life this way," said Wyman. "Do you want to die?"

"No," said Syl, surprise driving away her fear for the moment.

"Then your life must be worth something to you, after all?"

It was a point, Syl admitted. For the first time she was seeing happiness as differing in degree rather than in kind. She wasn't as happy as everybody else, true, but that didn't mean she was unhappy.

Automatically she thought of Greg. She was happy with him—not supremely happy, but certainly happy.

"Another thing. You didn't ask me whether it was possible for you to be made emotionally like the rest of us."

"No," Syl admitted. "I'm not sure I'd want that. After all, I'm me. I don't want to be someone else, even a happier someone else."

"Then what are you complaining about?"

"I'm not complaining, I'm . . ." Syl met Wyman's amused glance and laughed involuntarily. "Oh well," she said, unable to think of anything else to say.

"Another thing you didn't ask me. You haven't asked what generally happens to throwbacks."

Syl stopped laughing. "No. I wanted to, but I was scared. Rayson said something about people like me being killed."

Wyman nodded. "That's one thing that may happen. You see, the rest of us, the people of to-day, don't lie, cheat or kill, because we don't want to. That's all. We're not incapable of these things. In fact, if you'd been like some throwbacks, you'd have found out that if it were strictly sound and reasonable for us to kill, we'd kill."

Syl sat silent, afraid again. This was a different matter from recklessly daring the whole world to stop her doing what she liked, sure it wasn't going to do anything.

Wyman looked at her with such sympathy, such kindness that she had to make a desperate effort not to burst into tears.

"Don't fight it, Syl," said Wyman, seeming to read her thoughts. "Cry if you like."

Nobody cried any more, except children when they were hurt. And when the pain stopped, so did the tears.

Syl cried. First a few tears welled from her eyes and ran down her cheeks, as if they had to force their way out. Then she sobbed. Finally she was weeping as she hadn't done since she was six.

Wyman didn't touch her, but she could still feel his sympathy. Greg was the only other person who sometimes looked at her like that.

Curiously, when the tears stopped, she felt much better. She hadn't expected that. She had thought that if she did cry, she would become more and more miserable until at last she wouldn't care about anything. It wasn't like that at all. Perhaps she should have cried long ago.

"Shall I tell you some more, Syl?" Wyman asked.

"Yes. Please."

"You've told me about yourself, and I believe you. You're not bad, not evil as some throwbacks have been. Generally they're men—at least, most of the ones I know about have been men. They commit inhuman crimes, fantastic cruelties that I won't force you to think about. They do strange, incredible things out of crazy jealousy—for these men are usually insanely possessive. And sooner or later one or two people discuss the matter, and decide the world would be a better place without this man in it, and he's quietly executed and forgotten."

Syl was silent. She wanted to ask questions, but didn't dare. She was afraid of asking them and even more afraid of the answers.

"Cases like yours," Wyman said, "I don't often hear about. There may be a lot more than twenty throwbacks in the world to-day. Because—do you know what happens to people like you, Syl?"

Syl shook her head.

"They find out they're different. They can't help being different. But they also find that the more selfish and cruel they are, the more miserable they become. So these throwbacks, the people like you, Syl, who would have been ordinary, decent, friendly people at the right time, in prehistory—these people, people like you, find out that they're happiest if they just try to live like the rest of us, even if it's not so easy for them."

"I see. Then what I should do is marry Greg and pretend to be an ordinary, serene human being?"

Wyman sensed the bitterness in her tone. "What else do you want to do, Syl?"

"I want to meet someone like me. I want to be able to see what a throwback looks like and how he acts. I can't analyse myself."

Wyman thought for a long time. "I don't think you should do that, Syl," he said at last, quietly. "For one thing, it might be dangerous."

"I thought you said I wasn't dangerous?"

"Neither you are. But two throwbacks, together . . . Tell you what," he said with sudden resolution. "Go and see John Sayers."

"Is he a throwback?"

"No, but he'll give you another point of view. Perhaps I shouldn't send you to him without knowing what it is—will you promise that after you've seen him you'll come back to me?"

"He knows about throwbacks?" It bewildered Syl to be meeting three men in such a short time, all of whom knew about throwbacks, after she had failed to find even one over such a long period.

"Not only that, he has a theory to account for them. Probably different from mine. Go and see him, and come back."

"All right," said Syl wryly. "What have I got to lose?"

"There's one thing more I can't help saying," said Wyman quietly, with obvious sympathy. "If it sounds as if I'm gloating, try to realise it isn't meant that way. If the people of history, the people like you, knew of our world and our society and exactly what they're like, do you know what, in their ignorance, they would have thought this would be for them?"

Syl waited.

"Paradise," Wyman sighed.

4.

Sayers lived in Edinburgh. Syl flew straight to Edinburgh, deciding that if she was going to see him at all, it might as well be at once.

On the way she called Greg and told him what had happened. She didn't consider whether she should or not—it seemed the natural thing to do.

That was all very interesting, he said, and when was she coming in person to discuss the matter—and other matters?

She switched off the wrist radio.

Sayers, when she called him later, had much the same point of view, apparently. "Don't like the radio," he said rapidly. "I like to see the person I'm speaking to. Come right over."

She did.

She was surprised to find how young Sayers was. Rayson and Wyman had both been old. Sayers was a small, thin, excited young man who had too much energy to be able to stay still for long.

She told him about Rayson and about Wyman.

"Good chap, Wyman," said Sayers at the furious rate which seemed to be his usual way of talking, as if life was too short to say all the things which ought to be said, and do all the things which ought to be done. "You say he knows about my theory but not what it is?"

"Then he didn't call you?" asked Syl quickly. It was pleasant to be trusted. Rayson had warned Wyman about her, but Wyman hadn't thought it necessary to put Sayers on his guard.

"Call me about you? What about you?"

She hadn't told him yet that she was a throwback. She told him some of what she had told Wyman.

"Ah!" said Sayers, delighted. "You're immune. Always wanted to meet someone who was immune. Never did. Tell me all that over again, and I'll write it down."

He dashed to his desk and began writing furiously.

"Immune?" said Syl. "Immune to what?"

He looked up apologetically. "Only a theory," he said. "Seems Wyman has another theory. We agree that you're like the people of prehistory. We have different explanations, that's all."

"And what's yours?" Syl demanded.

"Wyman calls you a throwback, believing that there's been an evolutionary change in the human race. I say you're immune to what makes the rest of us as we are."

"You mean it's forced on you?" Syl exclaimed.

"If you like to look at it that way, yes. It's a change which was made deliberately, not by nature but by men."

After a few surpriscs, one ceases to be surprised any more. Besides, somehow what Sayers said made sense, at once, to Syl.

"Go on," she said quietly.

"Are you sure you're a—throwback? You don't act like one, Syl."

"Mild case, I'm told," said Syl wryly. "I'd have been an ordinary decent, friendly person in prehistory, Wyman tells me. Makes me wonder about some of the other throwbacks."

Sayers pushed back his notebook regretfully. "Well, consider late prehistory," he said. "Why has so little come down to us?"

"I know there's a theory that it's all been censored."

Sayers raised his eyebrows. Not many people had heard of that theory. "If you have," he said, "you must know it's more than a theory. It's just a question of what, exactly, has been censored—what wasn't to be allowed to pass from prehistory into this age."

"Yes," said Syl impatiently.

"Isn't it clear everything has been very carefully censored to prevent any information about the old emotion pattern of human beings from coming down?"

"Is that it?" Syl murmured, half to herself.

"Well, look. Music survives complete, except for songs and operas—emotional. Emotion of music is apparently all right, but not the lyrics. In literature, the same thing. No emotion except selected, desirable emotions. No complete picture of what people were like. Isn't that so? No plays to show how they acted, no novels giving a picture of people's pattern of life . . ."



He had been talking so fast that Syl could hardly make out the words. Suddenly he paused for breath and grinned at his own enthusiasm.

"All right, let's call the people of prehistory *homo sapiens*, and the people of to-day *homo serenus*. Now, who would censor emotions?"

He obviously thought at the same furious rate at which he did everything else, and Syl had to allow herself a few seconds to catch up with him and see the significance of his question.

"Well, I don't think *homo serenus* would censor anything—would he?" she asked doubtfully.

"Precisely," said Sayers triumphantly. "Whoever did the censorship must have thought the information was dangerous. But it's not in the least dangerous to us. Yet it's been cut out of all records. So it must have been done by *homo sapiens*."

Syl saw that. "But why?"

"Because *homo sapiens* was just going to be replaced by *homo serenus* and knew it," said Sayers. "So he cleared the way—destroyed the records—pretended he never existed!"

"That's impossible," Syl shot back. "*Homo sapiens* was like me, you say. People like me would never allow another race to take over."

"No," Sayers agreed. "There never was another race. *Homo sapiens* changed himself into *homo serenus*. And not fully understanding the new product, he thought it necessary to cut out all information about the change, and what the change was *from*. Hence the censorship. Then the arrival of *homo serenus*. Then somehow—I don't know yet how it was done—censorship afterwards for a time. For a hundred years, in fact, until the takeover was complete."

Sometimes a thing is difficult to see—yet, once seen, it is so obvious that the very person who couldn't see it wonders why everyone else doesn't.

It was like that with Syl. There was more than a ring of truth about Sayers' theory. It not only fitted more and more of the facts as Syl tried them for size, it also suggested new possibilities right away.

"How could this change be made?" she asked. "Drugs?"

"Not over all these centuries," said Sayers positively, "without any sign of it, without staff to operate the system. Not when the effect has been so nearly complete. You haven't had a different diet from the people about you, have you?"

"No."

"My guess is some kind of encephalographic control by a broadcast wave, probably beamed, still being beamed, from an artificial satellite that was never meant to be discovered—small, dark, and fairly close to Earth."

"And why should I be immune?"

"Different brain structure, I suppose. Whatever it is, it seems to be permanent. There's no case of a throwback, as Wyman calls them, ceasing to be a throwback. At least, I don't know of any. Ask Wyman. He knows far more about individuals than I do."

But Syl had lost interest in that point. Its importance shrank to nothing as a new, startling idea grew in her mind.

"I think," she said tentatively, "that *homo sapiens* may possibly have made a very big mistake."

Sayers sobered suddenly, and just for a moment spoke slowly and thoughtfully. "You think so, Syl? Why?"

"I think I know why the music and art and poetry of prehistory is so magnificent. Because it was free. The men who wrote it were free. The people who set up this control forced the human mind into a rut."

"People are happy, perhaps, but it's the happiness of ignorance. It's not real happiness, it's enforced happiness. Happiness by order."

That's the law I was always looking for. The human race gave up freedom for this forced contentment. The contentment of half-power minds!"

As Syl became excited, Sayers became cooler. But he didn't seem to disagree with what she said.

"I've been working on this for a long time, and I've still a lot to do," he said. "But I think you're right. I *think* you're right."

He paused for a moment, then said: "I'll give you two little pieces of evidence that *homo sapiens* was much more *sapiens* than *homo serenus*."

"You know, when you destroy history you're bound to leave gaps. When I was merely studying prehistory I found strong evidence of two things that made me gasp. I disbelieved the evidence then. Now I don't."

"How long would you say it was between the very first powered ship—a steamship—and the use of atomic power?"

"I guess about two thousand years," said Syl.

"No," said Sayers. "Less than two hundred."

Syl gasped. "But—"

"And the other thing. Over how many centuries would you say the births of Beethoven, Schubert, Weber, Verdi, Tschaiakowsky, Dvorak, Schumann, Mendelssohn, Puccini, Chopin, Liszt, Brahms, Wagner and Berlioz were spread?"

Even knowing Sayers was going to tell her something almost incredible, Syl had to say: "Ten, anyway."

"One," said Sayers. "Just one. All those great composers were born within one hundred years. And in one thousand, we have just two who might perhaps compare with some of them."

They talked for a long time. They talked all day and well into the night.

And what they agreed was that *homo sapiens* had made his greatest mistake in deciding to take over from nature. He had all but destroyed creative art and high intelligence and scientific progress in making of mankind a race of controlled, happy, unthinking animals.

It was high time to turn *homo serenus* back into *homo sapiens*, if it was possible, and make him once more a real creature, with hopes and fears and woe and ambition and enormous talents, instead of a friendly, cheerful robot who merely lived until he died and achieved nothing but his own serene contentment.

"It's possible," Wyman admitted, when Syl told him Sayers' explanation for the throwbacks. "In fact, it's very likely indeed. I must see Sayers soon."

"Then—don't you think something should be done about this?"

"Such as what?"

"Finding out if there is such a beam and such a station. And if there is—destroying it."

Wyman took that very calmly. "Does Sayers agree with this, Syl?"

"Yes!"

"I hadn't expected that. But remember, Sayers doesn't know the throwbacks. He knows of them, but he hasn't met them and studied them. I have."

"What difference does it make?" Syl demanded. "I know the throwbacks aren't very nice people. They're selfish, they fight, they kill each other, they probably commit crimes for which we haven't even the words. But they're genuine human beings. They feel genuine emotions. They have the full use of their brains, and they can really work wonders with them. As writers, scientists, musicians, artists—"

"I know, Syl, I know." He sighed. "I didn't want you to meet another throwback . . ."

"You mean now I'm going to?" asked Syl excitedly.

"I don't see any alternative. Only you must promise me not to tell him you're a throwback too. If he sees it for himself, you can't help that, but otherwise . . ."

Syl wasn't listening. She was suddenly excited at the idea of meeting someone like herself, with the same problems as herself. This was what she had wanted all along—all her life.

"Promise, Syl?" Wyman asked.

"I promise. But whatever happens between him and me—don't you see, it doesn't make any difference? I know *now* that this is a happy world, a bluebird world, and that the world of *homo sapiens* never was and never will be anything like it. That's quite irrelevant."

"I know, Syl, I know," he said again. "But still—see him. Rex Walton. He lives in Yorkshire, not far from Leeds."

Syl looked at him with sudden shrewdness. "Suppose I fall in love with this Rex Walton?"

"Then I hope you'll be very happy."

"But you don't expect I will? All right, I wanted to see a throwback anyway. But I mean it, Henry—whatever happens won't affect the fact that people to-day are just imitation people, and even if they're going to be less happy they should be made real again."

"No," agreed Wyman. "I don't suppose it will."

His refusal to argue puzzled Syl. He *could* argue. She was aware herself of several arguments which could be put up on the other side.

"Be careful, Syl," he said.

5.

Three houses stood together, a little community in themselves. The biggest was the Walton house. Rex was the second of six children, and of course none of the others were throwbacks.

There were about a dozen people around as Syl landed her plane, and even before it had stopped moving she had picked out Rex. She knew him by his physical arrogance, obvious at a glance. She paused for a moment before climbing out of the plane, looking at him.

So that's what a throwback looks like, she thought.

She neither liked nor disliked what she saw. Rex was tall and strong, but so were most of the others she saw. He had a discontented frown, which confirmed the identification, yet he wasn't by any means unattractive.

Why, she wondered for the twentieth time, had Wyman changed his mind and sent her to see Walton after all? Presumably she was supposed to dislike Rex and give up the idea of freeing everyone from the mental control which Sayers believed was somehow exerted over the whole world. But she didn't think that was going to happen. Wasn't it much more likely that she and this Rex Walton would find themselves in rapport at once, finding things in common which neither of them had ever found before with all the thousands of people they must have met?

That was another reason why she hesitated. She was thinking of Greg again. It was always hard not to think about Greg. Things would never be perfect between her and Greg, but—she didn't want to lose him. She wasn't sure that she wanted to meet a man who might come between her and Greg.

That was utterly ridiculous, she told herself angrily. She had spent her life looking for happiness that nobody else had to look for, and this was another chance—a good chance. For the first time she was going to meet a man like herself, a man who would understand her problems as Greg never could, a man who might really be able to share her life . . . and she hesitated, because she didn't want to lose the second-rate thing she had found with Greg, the thing that wasn't love, wasn't happiness, wasn't more than affection and a superficial sort of peace.

She climbed out of the plane and went straight to Rex. She hadn't warned him she was coming, because she couldn't think of anything to say.

"Rex Walton?" she said, smiling. "I'm Syl Douglas. Can I talk to you? I promise you I've something rather interesting to talk about."

His frowned darkened as he looked at her. "Wyman sent you," he said accusingly. She nodded.

"I might have known it," he said bitterly. "Rex Walton, the semi-human freak, goes on show again. Wyman promised he'd leave me in peace, but I see a promise doesn't matter much to him."

"Wait a minute," Syl protested. "It's nothing like that. I expect Wyman thought you'd be glad to meet me."

He grinned unexpectedly at that, and the whole aspect of his face changed. The effect of his bitter, angry tone was washed away at once.

"Well, maybe there's something in that," Rex admitted. "Let's go somewhere a little more private, shall we?"

He led her to the back of the house. The others who caught Syl's eye smiled at her, and she smiled back automatically. Nobody obtruded himself. If Syl wanted to see Rex, that was no concern of anyone else unless they were invited into the party.

Behind the house was a well-tended lawn. There were wooden seats and a couple of deck-chairs. Syl threw off her plastic flying suit gratefully and relaxed in the afternoon sunshine in one of the deck-chairs. She was aware of Rex looking at her with interest which she found by no means unwelcome. She had obviously made a considerable impression on him.

"All right," said Rex agreeably. "Why did Wyman think I'd be glad to meet you?"

Syl hesitated. She knew Wyman trusted her not to throw out hints that would be as good as telling Walton she was a throwback.

"You know Wyman's theory that you're a throwback?" she asked bluntly.

The frown darkened his face again. "Yes," he said briefly.

"Well, I don't believe it, and I don't think he believes it himself now." She went on to explain Sayers' theory to account for the throwbacks. "If this is so," she concluded, "people like you are the true humans—real people, unadulterated people. It's the others who are the semi-human freaks, not you. What do you think about that?"

His frown was thoughtful rather than angry now.

"What's this to you?" he asked abruptly.

"Does it have to be something to me?" Syl asked.

"What's this, a guessing game?" Rex demanded.

She shook her head. "Anyway," she went on, sidestepping his first question, "I think we should find out if we can whether this is so or not, and if it is, consider whether it's a good thing for people's emotions to be controlled by a machine, or whatever it is—"

"What's this to you?" Rex repeated, more insistently than before. "Don't tell me it's just a theoretical problem to you. People don't get excited about theoretical problems."

Syl was silent.



"Didn't you hear me?" Rex exclaimed. "Didn't Wyman tell you about me? When I ask a question, it's answered. Out with it."

He stood up. "What's this to you?" he said once again. Syl shook her head.

What happened then was entirely new in Syl's experience. She had handled others roughly, but that was a very different thing from being handled roughly herself. Even she didn't deny the justice of it. However, that didn't make her like it.

Rex wasn't particularly cruel. He didn't mean her any real harm. He merely threw her about, twisted her arms, forced her to her knees in front of him, kissed her savagely, and generally showed that he was boss. The mingling of kissing and hurting was the thing that shocked Syl most.

He was just sufficiently stronger than she was to be able to do pretty much what he liked with her. Syl fought back and struggled without much effect.

She had never been sorry for herself because of anything anyone had done to her, and she wasn't now. Perhaps she deserved it. She was a prisoner, she was being hurt, she was being made to do what Rex liked—and the most humiliating thing about it was that if he liked to do anything worse there was nothing she could do to stop him.

It was an education to Syl. She realised that Wyman must have known something like this must happen, and meant it to happen.

When Rex left her at last it was because she had managed to retaliate and made his nose bleed. He went away to stop the bleeding, having caught her by one leg and heaved her into a bush as a parting gesture.

Still sprawled in the bush, Syl went over what had happened in her mind. She was furious and at the same time a little afraid of Rex, but she was able to confine her anger and fear to one corner of her mind and think coolly about herself, Rex, Wyman and the throwbacks.

After a few minutes she snapped on her wrist radio, still without moving, and called Wyman.

"I've just been beaten up," she announced grimly.

"No, I don't think you have, Syl," Wyman told her. "Not by Rex Walton. No doubt you think you have—but didn't he just treat you a little roughly?"

"Yes, damn you," said Syl heatedly.

"Did he know you were a throwback too?"

"No. And I didn't tell him."

"Good. Syl, I think you've seen already that there are degrees among you people. Can you imagine someone as much tougher and wilder than Rex as he is tougher than you?"

Syl calmed herself. "That isn't the point, I keep telling you. I don't deny the world is a happier place than it would be if we were all in our natural emotional state. But if we were all as we were meant to be, as we really are under this . . . compulsion, we'd have to make allowances for each other, we'd have to pull together. It isn't *right* that people should be . . ."

"You reach this conclusion by intuition, Syl?" Wyman asked gently.

"Well, suppose I do? What's wrong with intuition?"

"Nothing at all, Syl. Only feed it some more data. Will you stay with the Waltons until noon to-morrow?"

"After this!" Syl exclaimed.

"You'll find Rex thinks it's nothing."

"It's not what Rex thinks that matters!" Syl exclaimed.

"No, it's what you think that matters, Syl. Don't you see—before you do anything about attacking the compulsion, as you call it, to be happy, you *must* be quite sure you want to attack it."

"Oh well," said Syl. "Since you know everything—what's he going to do next?"

"Isn't that obvious?"

Syl felt her face going hot as her imagination threw up vivid pictures.

"I'm going *now*!" she declared violently.

"Now, Syl. You're going to fill the whole world with Rex Waltons, remember."

"But—"

"I suggest you get hold of an amnadrine sac and keep it in your mouth. You can bite it any time you like—if you don't breathe for ten seconds it won't affect you, but it'll knock Rex out. Don't use it unless you have to. And certainly not until you have to."

"This is crazy," said Syl flatly.

"Certainly. But wouldn't it be crazier to do a thing before you had the faintest idea of what you were really doing?"

Syl snapped the radio off viciously.

It was only necessary to drop the merest hint to the Waltons, and Syl was invited to stay. She took that for granted. They were nice, ordinary people, the other Waltons, not in the least like Rex.

Even Rex . . .

In the evening he half apologized for, half laughed off the incident of the afternoon. "If you will go around looking good enough to eat," he told her, "you can hardly object if someone tries to take a small bite." And that, as far as he was concerned, was obviously the end of the matter.

Syl didn't know the phrase "spoiled brat," but if she had, she would certainly have applied it to Rex. People always gave in to him. The throwbacks went on taking, taking, taking. Everybody else just let them take.

The world couldn't have gone on as it did if there had been a lot of throwbacks, a significant percentage of the population—even five per cent. Syl could see that. This society wasn't made for them and couldn't handle them.

But she still knew that it was wrong for human emotions to be tampered with. This encephalographic control was blocking nature. It was keeping mankind in happy stagnation for a thousand years or ten thousand years, when he should have been growing up, pressing outwards to the planets and the stars, working towards his final glorious destiny.

This episode was a tiny, unimportant thing. No doubt Rex would once more make a nuisance of himself, but what would that prove?

You couldn't judge a person in a society to which he didn't belong.

Wyman's idea in sending her here was too simple. He thought she would compare Rex with the people about him, and decide that the world must stay as it was.

He had made a big mistake.

When Rex did come to her bedroom, what happened was not what she had expected.

The door had no lock, of course. Syl had been asleep, but she awoke knowing Rex was in the room. It wasn't quite dark. The curtains weren't drawn and there was enough light to see dimly.

"Go away, Rex," she said clearly.

There was a movement in the darkness, and Rex kissed her very gently and tenderly. "I will if you really mean it," he said. "But I must talk with you, Syl. I never wanted anything as I want you. I love you, Syl. I want to marry you. Yes, I'm sure, already."

Syl was silent. He still didn't see, apparently, that she was a throwback like himself. If that was what particularly attracted him about her, so quickly, he didn't know it.

Was she, then, more like the other people of the world than like a throwback?

He talked for a long time. He said all the usual things: he had known from the moment he saw her that this was the most important day in his life, he couldn't live without her, he wanted to be patient and let her get to know him properly, but it was impossible. Through it all ran the egocentricity she expected—it was the most important day in *his* life, *he* couldn't live without her, he wanted *her* to know him.

Then he begged. Syl felt her face grow hot again at the things that he said. Instead of raging and lording it over her, he was grovelling to her, humbling himself in every way he could think of. She couldn't understand it, the switch from arrogant selfishness to cringing humility. Then she realised vaguely that in some obscure way he enjoyed exposing himself to her. He was hurting himself and taking strange, incomprehensible pleasure from the hurt.

And while he talked, she realised, reluctantly, another thing that Wyman had meant her to see. This creature had no dignity. There was no pride about him, no independence, no natural human dignity.

"Go away," she said at last. "I'm sorry for you, Rex—is that what you want?"

There was silence for a few seconds. When Rex spoke again, it was the other Rex, the one who had amused himself with her in the garden.

"No," he said. "I hoped I meant as much to you as you mean to me, but I see you haven't had enough time. It can't be helped. I take what I want, Syl."

"Don't you realise," asked Syl curiously, "that if you do, it's only because people let you?"

"No!" Rex exclaimed.

"Why won't you believe that?"

"Because it's not true."

"Definition of things which are not true—things which Rex Walton doesn't believe."

Rex hit her across the mouth. She felt blood trickle from one corner. But for once Syl wasn't angry. Some things were too important to get angry about.

"Listen, Rex," she said earnestly. "You're different. You know that. Do you know why and how you're different? Do you know why you want things that nobody else wants?"

"Everybody wants them," Rex said thickly, "but only I have the courage to take them."

"You know that's not true."

"I know it is, damn you! Shut up. I'm not going to waste any more time talking to you. Don't you understand that what I say goes—now and always? You will."

Syl had taped the tiny plastic sac to her incisors, and she merely pulled it round with her tongue, bit hard, opened her mouth and held her breath. Rex slumped across her legs. She waited until the highly volatile fumes must have dissolved in the air, then breathed deeply.

It was still all quite irrelevant. Rex was a misfit. Nothing he could do made the slightest difference to Syl's conviction. She *knew* a world of controlled emotions was wrong, utterly wrong, and could never be anything else but wrong.

She didn't wait until noon. She had made Wyman no promise, and anyway, nothing Rex could do would make much difference now.

He watched broodingly as she climbed into her plane and took off. Syl had an uncomfortable feeling that someone was going to suffer for this. And the people who suffered wouldn't even have the satisfaction of knowing it was because of Syl Douglas that Rex was so savage, resentful and vengeful.

She had flown about fifty miles when the engine of her plane cut out.

Now Syl's engine just couldn't cut out. If anything had been about to go wrong, there would have been warning on her dash. There was only one possible explanation for the failure—Rex. Rex had tampered with the plane's engine.

Syl wasn't perturbed, yet. She felt her belt to check her propulsion unit. Not until she tested it and found there was no power did sheer terror grip her.

She tried to put into a glide a machine which wasn't meant to glide. The plane's nose dropped until it was pointing straight down, the Earth tilted until Syl could see no sky, and she realised she was going to die.

Planes didn't fail. Only if someone deliberately put them out of action could there be any crack-up—and why should anyone do that? There was no parachute. If people had to leave a plane in midair for any reason, they'd use their propulsion units.

Even yet, with the ground shooting up at her, Syl couldn't believe it. How could Rex bring himself to destroy her? She had heard of murder and killing, but she couldn't see it happening this way. Last night, Rex might have threatened her, might even have meant to carry out his threats. That was dimly understandable. But this—cold, deliberate murder—what explanation could there be when Rex didn't even have anything to gain?

She got up and searched feverishly about the cabin, in the hope that there might be something she could do, something she could use—

And there was. Syl Douglas wasn't to die, after all. In a locker was an old propulsion unit. She remembered discarding it but not where she had put it. It was sheer good fortune, not calculated by herself or Henry Wyman or Rex Walton.

She was out of the plane in a few seconds and floating down after it. It crashed into the ground when she was still four hundred feet up, almost burying itself.

And as she floated down, Syl changed her mind. Perhaps, she admitted to herself, this last incident was different because it concerned her and not just the rest of the world; perhaps murder was in a different class from all the other things that Rex had done and said.

Whatever the reason, she saw suddenly, clearly, that it was quite impossible to fill the world with Rex Waltons, no matter what the alternative was. Wyman had won after all. She wouldn't try to find out any more, not even whether Sayers' theory was correct or not, and she certainly wouldn't try to destroy the control that had made a world of Rex Waltons a bluebird world.

Syl was in Wyman's room again. Wyman was still white. "Saying I'm sorry is utterly inadequate, Syl," he said. "I completely misunderstood Walton. I knew he would hurt you and bully you and threaten you, but this is entirely beyond anything I believed possible."

Syl shrugged. "Forget it," she said. "Probably why he went further than you guessed was because of me—because I'm a throwback too. Can anything be done about him?"

"Surgically or psychologically, no." Wyman was still shaken and spoke jerkily. "But by animal justice—yes. Everybody round about him will be warned. If anything like this happens again—"

"He'll actually be killed?"

"He'll actually be killed," said Wyman seriously. "I told you—it's the first law of survival, even for us."

He saw that Syl wanted to put Rex from her mind, and changed the subject. "What are you going to do now?"

Syl shrugged again. "Go back to Greg, marry him, raise a family and be moderately happy ever after," she said whimsically. Some of her earlier bitterness was gone from her. "There doesn't seem to be any risk that our children will be throwbacks."

He nodded. "You don't want to hear any more about this? There's still a lot I can tell you."

"I know enough. Too much."

"Just one thing you should know. Syl, Sayers told you, didn't he, that you can't really destroy history. It's true. There's always clues for men to fit together later. I know a lot more about prehistory than I told you. Only I didn't think you'd believe it until you'd seen Rex."

"I think you've been working on the idea that there must be compromise, reason, balance, agreement for civilization to be possible at all. You're wrong, Syl. The old world *was* a place of murder, famine, crime, feuds, jealousy, fear and selfishness."

"I don't know how this change came, this emotional control, whatever it was, but I do know this. It *had* to come. Survival again. The human race got to a state where it needed it if life was to go on."

Syl didn't have anything to say.

Wyman saw that, and nodded slowly. "I thought you'd agree in the end, Syl. When you know the whole truth, the only answer is that this way is right."

"No!" Syl exclaimed. "You think I believe that? I don't, and I never will. You still don't understand, Henry. All I said, all I believed, was right, and this control should be destroyed whatever else happens. But . . ."

"But what?"

"I'm not big enough to do it, knowing the alternative. I'm weak, Henry. I've called Greg to come and pick me up, since my own plane's smashed. I'm going with him, and I'll never do another thing about the throwbacks or this emotional control that's keeping people in check by turning them into joyful automatons. I'm going home—but that's only because I'm a coward."

"Goodbye, Syl. And—I hope you're wrong."

After she had gone he stared for a long time at the door, thinking, wondering, trying to reassure himself. 'Could Syl be right?

Then she came back to say one thing more. She stood at the door thoughtfully. "Why didn't you tell me," she asked, "that there were three throwbacks in England?"

"Three?" he exclaimed.

"Walton, me, and you."

"Syl, that's ridiculous."

"You told me yourself that there were degrees . . . Why have you always been so interested in throwbacks? Why do you understand them so well?"

He looked as if she had hit him in the solar plexus.

"You mean you don't know?" asked Syl mischievously. "Don't you know that if anyone's any good—if he achieves anything—if he's got real understanding—if there's any real depth to him—the emotional control has slipped, and he's almost a real human being?"

"Syl . . ."

But she was gone, to her Greg, and to her modified happiness.

J. T. McIntosh

Australian Convention

Britain's author-scientist Arthur C. Clarke was Guest of Honour at this year's Australian Convention held in Sydney at the end of March, which resulted in considerable press and radio publicity for the annual event. Immediately afterwards he left for the Great Barrier Reef where he will spend many months filming underwater life in colour for a new book he has been commissioned to write.

This is one of the stories (from a total of over five million words) that the popular author/editor of Galaxy Science Fiction in U.S.A. hopes will eventually be published in a hard-cover collection of some of his favourite stories. It is a particular pleasure for this magazine to be the first in Britain to present Mr. Gold in his own right—as an author.

MAN OF PARTS

By H. L. Gold

Illustrated by HUNTER

There wasn't a trace of amnesia or confusion when Major Hugh Savold, of the Fourth Earth Expedition against Vega, opened his eyes in the hospital. He knew exactly who he was, where he was, and how he had got there.

His name was Gam Nex Biad.

He was a native of the planet named Dorfcl.

He had been killed in a mining accident far underground.

The answers were preposterous and they terrified Major Savold. Had he gone insane? He must have, for his arms were pinned tight in a restraining sheet. And his mouth was full of bits of rock.

Savold screamed and wrenched around on the flat, comfortable boulder on which he had been nibbling. He spat out the rock fragments that tasted—nutritious.

Shaking, Savold recoiled from something even more frightful than the wrong name, wrong birthplace, wrong accident, and shockingly wrong food.

A living awl was watching him solicitously. It was as tall as himself, had a pointed spiral drill for a head, three knee-action arms ending in horn spades, two below them with numerous sensitive cilia, a row of socketed bulbs down its front, and it stood on a nervously bouncing bedspring of a leg.

Savold was revolted and tense with panic. He had never in his life seen a creature like this.

It was Surgeon Trink, whom he had known since infancy.

"Do not be distressed," glowed the surgeon's kindly lights. "You are everything you think you are."

"But that's impossible! I'm an Earthman and my name is Major Hugh Savold!"

"Of course."

"Then I can't be Gam Nex Biad, a native of Dorfel!"

"But you are."

"I'm not!" shouted Savold. "I was in a one-man space scout. I sneaked past the Vegan cordon and dropped the spore-bomb, the only one that ever got through. The Vegans burned my fuel and engine sections full of holes. I escaped, but I couldn't make it back to Earth. I found a planet that was pock-marked worse than our moon. I was afraid it had no atmosphere, but it did. I crash-landed." He shuddered. "It was more of a crash than a landing."

Surgeon Trink brightened joyfully. "Excellent! There seems to be no impairment of memory at all."

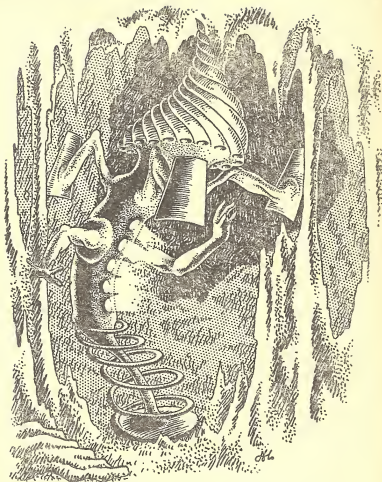
"No?" Savold yelled in terror. "Then how is it I remember being killed in a mining accident? I was drilling through good hard mineral ore, spinning at a fine rate, my head soothingly warm as it gouged into the tasty rock, my spades pushing back the crushed ore, and I crashed right out into a fault . . ."

"Soft shale," the surgeon explained, dimming with sympathy. "You were spinning too fast to sense the difference in density ahead of you. It was an unfortunate accident. We were all very sad."

"And I was killed," said Savold, horrified. "Twice!"

"Oh, no. Only once. You were badly damaged when your machine crashed, but you were not killed. We were able to repair you."

Savold felt fear swarm through him, driving his ghastly thoughts into a quaking corner. He looked down at his body, knowing he couldn't see it, that it was wrapped tightly in a long sheet. He had never seen material like this.



He recognised it instantly as asbestos cloth.

There was a row of holes down the front. Savold screamed in horror. The socketed bulbs lit up in a deafening glare.

"Please don't be afraid." The surgeon bounced over concernedly, broke open a large mica capsule, and splashed its contents on Savold's head and face. "I know it's a shock, but there's no cause for alarm. You're not in danger, I assure you."

Savold found himself quieting down, his panic diminishing. No, it wasn't the surgeon's gentle, reassuring glow that was responsible. It was the liquid he was covered with. A sedative of some sort, it eased the constriction of his brain, relaxed his facial muscles, dribbled comfortingly into his mouth. Half of him recognised the heavy odour and the other half identified the taste.

It was lubricating oil.

As a lubricant it soothed him. But it was also a coolant, for it cooled off his fright and disgust and let him think again.

"Better?" asked Surgeon Trink hopefully.

"Yes, I'm calmer now," Savold said, and noted first that his voice sounded quieter, and second that it wasn't his voice—he was communicating by glows and blinks of his row of bulbs, which, as he talked, gave off a cold light like that of fireflies. "I think I can figure it out. I'm Major Hugh Savold. I crashed and was injured. You gave me the body of a . . ." he thought about the name and realised that he didn't know it, yet he found it immediately, ". . . a Dorfellow, didn't you?"

"Not the whole body," the surgeon replied, glimmering with confidence again as his bedside manner returned. "Just the parts that were in need of replacement."

Savold was revolted, but the sedative effect of the lubricating oil kept his feelings under control. He tried to nod in understanding. He couldn't. Either he had an unbelievable stiff neck . . . or no neck whatever.

"Something like our bone, limb, and organ banks," he said. "How much of me is Gam Nex Biad?"

"Quite a lot, I'm afraid." The surgeon listed the parts, which came through to Savold as if he were listening to a simultaneous translation: from Surgeon Trink to Gam Nex Biad to him. They were all equivalents, of course, but they amounted to a large portion of his brain, skull, chest, internal and reproductive organs, mid-section, and legs.

"Then what's left of me?" Savold cried in dismay.

"Why, part of your brain—a very considerable part, I'm proud to say. Oh, and your arms. Some things weren't badly injured, but it seemed better to make substitutions. The digestive and circulatory system, for instance. Yours were adapted to foods and fluids that aren't available on Dorfel. Now you can get your sustenance directly from the minerals and metals of the planet, just as we do. If I hadn't, your life would have been saved, but you would have starved to death."

"Let me up," said Savold in alarm. "I want to see what I look like."

The surgeon looked worried again. He used another capsule of oil on Savold before removing the sheet.

Savold stared down at himself and felt revulsion trying to rise. But there was nowhere for it to go and it couldn't have got past the oil if there had been. He swayed sickly on his bedspring leg, petrified at the sight of himself.

He looked quite handsome, he had to admit—Gam Nex Biad had always been considered one of the most crashing bores on Dorfel, capable of taking an enormous leap on his magnificently wiry leg, landing exactly on the point of his head with a swift spin that would bury him out of sight within instants in even the hardest rock. His knee-action arms were splendidly flinty; he knew they had been repaired with some other miner's remains, and they could whirl him through a self-driller tunnel with wonderful speed, while the spade hands could shovel back ore as fast as he could dig it out. He was as good as new . . . except for the disgustingly soft, purposeless arms.

The knowledge of function and custom was there, and the reaction to the human arms, and they made explanation unnecessary, just as understanding of the firefly language had been there without his awareness. But the emotions were Savold's and they drove him to say fiercely, "You didn't have to change me altogether. You could have just saved my life so I could fix my ship and get back . . ." He paused abruptly and would have gasped if he had been able to. "Good Lord! Earth Command doesn't even know I got the bomb through! If they act fast, they can land without a bit of opposition!" He spread all his arms—the two human ones, the three with knee-action and spades, the two with the sensitive cilia—and stared at them bleakly. "And I have a girl back on Earth . . ."

Surgeon Trink glowed sympathetically and flashed with pride. "Your mission seems important somehow, though its meaning escapes me. However, we have repaired your machine . . ."

"You have?" Savold interrupted eagerly.

"Indeed, yes. It should work better than before." The surgeon flickered modestly. "We do have some engineering skill, you know."

The Gam Nex Biad of Savold did know. There were the underground ore smelters and the oil refineries and the giant metal awls that drilled out rock food for the manufacturing centres, where miners alone could not keep up with the demand, and the communicators that sent their signals clear around the planet through the substrata of rock, and more, much more. This, insisted Gam Nex Biad proudly, was a civilization, and Major Hugh Savold, sharing his knowledge, had to admit that it certainly was.

"I can take right off, then?" Savold flared excitedly.

"There is a problem first," glowed the surgeon in some doubt. "You mention a 'girl' on this place you call 'Earth.' I gather it is a person of the opposite sex."

"As opposite as anybody can get. Or was," Savold added moodily. "But we have limb and organ banks back on Earth. The doctors there can do a repair job. It's a damned big one, I know, but they can handle it. I'm not sure I like carrying Gam Nex Biad around with me for life, though. Maybe they can take him out and . . ."

"Please," Surgeon Trink cut in with anxious blinkings. "There is a matter to be settled. When you refer to the 'girl,' you do not specify that she is your mate. You have not been selected for each other yet?"

"Selected?" repeated Savold blankly, but Gam Nex Biad supplied the answer—the equivalent of marriage, the mates chosen by experts on genetics, the choice being determined by desired transmittable aptitudes. "No, we were just going together. We were not mates, but we intended to be as soon as I got back. That's the other reason I have to return in a hurry. I appreciate all you've done, but I really must . . ."

"Wait," the surgeon ordered.

He drew an asbestos curtain that covered part of a wall. Savold saw an opening in the rock of the hospital, a hole-door through which bounced half a dozen little Dorfellows and one big one . . . straight at him. He felt what would have been his heart leap into what would have been his chest if he had had either. But he couldn't even get angry or shocked or nauseated; the lubricating oil cooled off all his emotions.

The little creatures were all afire with childish joy. The big one sparkled happily.

"Father!" blinked the children blindingly.

"Mate!" added Prad Fin Biad in a delighted exclamation point.

"You see," said the surgeon to Savold, who was shrinking back, "you already have a mate and a family."

It was only natural that a board of surgeons should have tried to cope with Savold's violent reaction. He had fought furiously against being saddled with an alien family. Even constant saturation with lubricating oil couldn't keep that rebellion from boiling over.

On Earth, of course, he would have been given immediate psychotherapy, but there wasn't anything of the sort here. Dorfellows were too granitic physically and psychologically to need medical or psychiatric doctors. A job well done and a family well raised—that was the extent of their emotionalism. Savold's feelings, rage and resentment

and a violent desire to escape, were completely beyond their understanding. He discovered that as he angrily watched the glittering debate.

The board quickly determined that Surgeon Trink had been correct in adapting Savold to the Dorfel way of life. Savold objected that the adaptation need not have been so thorough, but he had to admit that, since they couldn't have kept him fed any other way, Surgeon Trink had done his best in an emergency.

The surgeon was willing to accept blame for having introduced Savold so bluntly to his family, but the board absolved him—none of them had had any experience in dealing with an Earth mentality. A Dorfellow would have accepted the fact, as others with amnesia caused by accidents had done. Surgeon Trink had had no reason to think Savold would not have done the same. Savold cleared the surgeon entirely by admitting that the memory was there, but, like all the other memories of Gam Nex Biad's, had been activated only when the situation came up. The board had no trouble getting Savold to agree that the memory would have returned sooner or later, no matter how Surgeon Trink handled the introduction, and that the reaction would have been just as violent.

"And now," gleamed the oldest surgeon on the board, "the problem is how to help our new—and restored—brother adjust to life on this world."

"That isn't the problem at all!" Savold flared savagely. "I have to get back to Earth and tell them I dropped the bomb and they can land safely. And there's the girl I mentioned. I want to marry her—become her mate, I mean."

"You want to become her mate?" the oldest surgeon blinked in bewilderment. "It is your decision?"

"Well hers, too."

"You mean you did the selecting yourselves? Nobody chose for you?"

Savold attempted to explain, but puzzled glimmers and Gam Nex Biad's confusion made him state resignedly: "Our customs are different. We choose our own mates." He thought of adding that marriages were arranged in some parts of the world, but that would only have increased their baffled lack of understanding.

"And how many mates can an individual have?" asked a surgeon.

"Where I come from, one."

"The individual's responsibility, then, is to the family he has. Correct?"

"Of course."

"Well," said the oldest surgeon, "the situation is perfectly clear. You have a family—Prad Fim Biad and the children."

"They're not my family," Savold objected. "They're Gam Nex Biad's and he's dead."

"We respect your customs. It is only fair that you respect ours. If you had had a family where you come from, there would have been a question of legality, in view of the fact that you could not care for them simultaneously. But you have none and there is no such question."

"Customs? Legality?" asked Savold, feeling as lost as they had in trying to comprehend an alien society.

"A rebuilt Dorfellow," the oldest surgeon said, "is required to assume the obligations of whatever major parts went into his reconstruction. You are almost entirely made up of the remains of Gam Nex Biad, so it is only right that his mate and children should be yours."

"I won't do it!" Savold protested. "I demand the right to appeal."

"On what grounds?" asked another surgeon politely.

"That I'm not a Dorfellow!"

"Ninety-four point seven per cent of you is, according to Surgeon Trink's requisition of limbs and organs. How much more of a citizen can any individual be?"

Gam Nex Biad confirmed the ruling and Savold subsided. While the board of surgeons discussed the point it had begun with—how to adapt Savold to life on Dorfel—he thought the situation through. He had no legal or moral recourse. If he was to get out of his predicament, it would have to be through shrewd resourcefulness and he would never have become a major in the space fleet if he hadn't had plenty of that.

Yes, shrewd resourcefulness, thought Savold bitterly, jouncing unsteadily on his single bedspring leg on a patch of unappealing topsoil a little distance from the settlement. He had counted on something that didn't exist here—the kind of complex approach that Earth doctors and authorities would have used on his sort of problem, from the mitigation of laws to psychological conditioning, all of it complicated and every stage allowing a chance to work his way free.

But the board of surgeons had agreed on a disastrously simple course of treatment for him. He was not to be fed by anybody and he could not sleep in any of the underground rock apartments, including the dormitory for unmated males.

"When he's hungry enough, he'll go back to mining," the oldest surgeon had told the equivalent of a judge, a local teacher who did

part-time work passing on legal questions that did not have to be ruled on by the higher courts. "And if he has no place to stay except with Gam Nex Biad's family, which is his own, naturally, he'll go there when he's tired of living out in the open all by himself."

The judge thought highly of the decision and gave it official approval.

Savold did not mind being out in the open, but he was far from being all by himself. Gam Nex Biad was a constant nuisance, nagging at him to get in a good day's drilling and then go home to the wife, kiddies, and their cozy, hollowed-out quarters, with company over to celebrate his return with a lavish supply of capsuled lubricating oil. Savold obstinately refused, though he found himself salivating or something very much like it.

The devil of the situation was that he was hungry and there was not a single bit of rock around to munch on. That was the purpose of this fenced-in plot of ground—it was like hard labour in the prisons back on Earth, where the inmates ate only if they broke their quota of rock, except that here the inmates would eat the rock they broke. The only way Savold could get out of the enclosure was by drilling under the high fence. He had already tried to bounce over it and discovered he couldn't.

"Come on," Gam Nex Biad argued in his mind. "Why fight it? We're a miner and there's no life like the life of a miner. The excitement of boring your way through a lode, making a meal out of the rich ore! Miners get the choicest titbits, you know—that's our compensation for working so hard and taking risks."

"Some compensation," sneered Savold, looking wistfully up at the stars and enviously wishing he were streaking between them in his scout.

"A meal of iron ore would go pretty well right now, wouldn't it?" Gam Nex Biad tempted. "And I know where there are some veins of tin and sulphur. You don't find them lying around on the surface, eh? Non-miners get just traces of the rare metals to keep them healthy, but we can stuff ourself all we want . . ."

"Shut up!"

"And some pools of mercury. Not big ones, I admit, but all we'd want is a refreshing gulp to wash down those ores I was telling you about."

Resisting the thought of the ores was hard enough, for Savold was rattlingly empty, but the temptation of the smooth cool mercury would have roused the glutton in anyone.

"All right," he growled, "but get this straight—we're not going back to your family. They're your problem, not mine."

"But how could I go back to them if you won't go?"

"That's right. I'm glad you see it my way. Now where are those ores and the pools of mercury?"

"Dive," said Gam Nex Biad, "I'll give you the directions."

Savold took a few bounces to work up speed and spin, then shot into the air and came down on the point of his awl-shaped head, which bit through the soft topsoil as if through—he shuddered—so much water. As a Dorfellow, he had to avoid water; it eroded and corroded and caused deposits of rust in the digestive and circulatory systems. There was a warmth that was wonderfully soothing and he was drilling into rock. He ate some to get his strength back, but left room for the main meal and the dessert.

"Pretty nice, isn't it?" asked Gam Nex Biad as they gouged a comfortable tunnel back toward the settlement. "Non-miners don't know what they're missing."

"Quiet," Savold ordered surlily, but he had to confess to himself that it was pleasant. His three knee-action arms rotated him at a comfortable speed, the horn spades pushing back the loose rock; and he realised why Gam Nex Biad had been upset when Surgeon Trink left Savold's human arms attached. They were in the way and they kept getting scratched. The row of socketed bulbs gave him all the light he needed. That, he decided, had been their original purpose. Using them to communicate with must have been one of the first steps toward civilization.

Savold had been repressing thoughts ever since the meeting of the board of surgeons. Experimentally, he called his inner partner.

"Um?" asked Gam Nex Biad absently.

"Something I wanted to discuss with you," Savold said.

"Later. I sense the feldspar coming up. We head north there."

Savold turned the drilling over to him, then allowed the buried thoughts to emerge. They were thoughts of escape and he had kept them hidden because he was positive that Gam Nex Biad would have betrayed them. He had been trying incessantly, wheedlingly, to sell Savold on mining and returning to the family.

The hell with that, Savold thought grimly now. He was getting back to Earth somehow—Earth Command first, Marge second. No, surgery second, Marge third, he corrected. She wouldn't want him this way . . .

"Manganese," said Gam Nex Biad abruptly, and Savold shut off his thinking. "I always did like a few mouthfuls as an appetizer."

The rock had a pleasantly spicy taste, much like a cocktail before dinner. Then they went on, with the Dorfellow giving full concentration to finding his way from deposit to deposit.

The thing to do, Savold reasoned, was to learn where the scout ship was being kept. He had tried to sound out Gam Nex Biad subtly, but it must have been too subtle—the Dorfellow had guessed uninterestedly that the ship would be at one of the metal fabricating centres, and Savold had not dared ask which one. Gam Nex Biad couldn't induce him to become a miner and Dorfellow family man, but that didn't mean he could escape over Gam Nex Biad's opposition.

Savold did not intend to find out. Shrewd resourcefulness, that was the answer. It hadn't done him much good yet, but the day he could not outfox these rock-eaters, he'd turn in his commission. All he had to do was find the ship . . .

Bloated and tired, Savold found himself in a main tunnel thoroughfare back to the settlement. The various ores, he disgustedly confessed to himself, were as delicious as the best human foods and there was nothing at all like the flavour and texture of pure liquid mercury. He discovered some in his cupped cilia hands.

"To keep around for a snack?" he asked Gam Nex Biad.

"I thought you wouldn't mind letting Prad Fim and the children have some," the Dorfellow said hopefully. "You ought to see them light up whenever I bring it home!"

"Not a chance. We're not going there, so I might as well drop it."

Savold tried to open his cilia hands. They stayed cupped. That was when he realised that he had supposed correctly. Gam Nex Biad could prevent him from escaping.

Savold had to get some sleep. He was ready to topple with exhaustion. But the tunnels were unsafe—a Dorfellow travelling through one on an emergency night errand would crash into him hard enough to leave nothing but flinty splinters. And the night air felt chill and hostile, so it was impossible to sleep above ground.

"Please make up your mind," Gam Nex Biad begged. "I can't stay awake much longer and you'll just go blundering around and get into trouble."

"But they've got to put us up somewhere," argued Savold. "How about the hospital? We're still a patient, aren't we?"

"We were discharged as cured. And nobody else is allowed to let us stay in any apartment . . . except one."

"I know, I know," Savold replied with weary impatience. "Forget it. We're not going there."

"But it's so comfortable there . . ."

"Forget it, I told you!"

"Oh, all right," Gam Nex Biad said resignedly. "But we're not going to find anything as pleasant and restful as my old sleeping

boulder. It's soft limestone, you know, and grooved to fit our body. I'd like to see anybody not fall asleep instantly on that good old flat boulder . . ."

Savold tried to resist, but he was worn out from the operation, hunger, digging, and the search for a place to spend the night.

"Just take a look at it, that's all," Gam Nex Biad coaxed. "If you don't like it, we'll sleep anywhere you say. Fair enough?"

"I suppose so," admitted Savold.

The hewn-rock apartment was quiet, at least; everybody was asleep. He'd lie down for a while, just long enough to get some rest, and clear out before the household awoke . . .

But Prad Fim and the children were clustered around the boulder when he opened his eyes. Each of them had five arms to fight off. And there were Surgeon Trink, the elder of the board of surgeons, and the local teacher-judge all waiting to talk to him when the home-coming was over with.

"The treatment worked!" cried the judge. "He came back!"

"I never doubted it," the elder said complacently.

"You know what this means?" Surgeon Trink eagerly asked Savold.

"No, what?" Savold inquired warily, afraid of the answer.

"You can show us how to operate your machine," declared the judge. "It isn't that we lack engineering ability, you understand. We simply never had a machine as large and complex before. We could have, of course—I'm sure you are aware of that—but the matter just didn't come up. We could work it out by ourselves, but it would be much easier to have you explain it."

"By returning, you've shown that you have regained some degree of stability," added the elder. "We couldn't trust you with the machine while you were so disturbed."

"Did you know this?" Savold silently challenged Gam Nex Biad.

"Well, certainly," came the voiceless answer.

"Then why didn't you tell me? Why did you let me go floundering around instead?"

"Because you bewilder me. This loathing for our body, which I'd always been told was quite attractive, and dislike of mining and living with our own family—wanting to reach this thing you call Earth Command and the creature with the strange name. Marge, isn't it? I could never guess how you would react to anything. It's not easy living with an alien mentality."

"You don't have to explain. I've got the same problem, remember."

"That's true," Gam Nex Biad silently agreed. "But I'm afraid you'll have to take it from here. All I know is mining, not machines or metal fabricating centres."

Savold repressed his elation. The less Gam Nex Biad knew from this point on, the less he could guess—and the smaller chance there was that he could betray Savold.

"We can leave right now," the judge was saying. "The family can follow as soon as you've built a home for them."

"Why should they follow?" Savold demanded. "I thought you said I was going to be allowed to operate the ship."

"Demonstrate and explain it, really," the judge amended. "We're not absolutely certain that you are stable, you see. As for the family, you're bound to get lonesome . . ."

Savold stared at Prad Fim and the children. Gam Nex Biad was brimming with affection for them, but Savold saw them only as hideous, ore-crushing monsters. He tried to keep them from saying good-bye with embraces, but they came at him with such violent leaps that they chipped bits out of his body with their grotesque pointed awl heads. He was glad to get away, especially with Gam Nex Biad making such a damned slobbering nuisance of himself.

"Let's go!" he blinked frantically at the judge, and dived after him into an express tunnel.

While Gam Nex Biad was busily grieving, Savold stealthily worked out his plans. He would glance casually at the ship, glow some mild compliment at the repair job, make a pretence at explaining how the controls worked—and blast off into space at the first opportunity, even if he had to wait for days. He knew he would never get another chance; they'd keep him away from the ship if that attempt failed. And Gam Nex Biad was a factor, too. Savold had to hit the take-off button before his partner suspected or their body would be paralyzed in the conflict between them.

It was a very careful plan and it called for iron discipline, but that was conditioned into every scout pilot. All Savold had to do was maintain his rigid self-control.

He did—until he saw the ship on the hole-pocked plain. Then his control broke and he bounced with enormous, frantic leaps into the airlock and through the corridors to the pilot room.

"Wait! Wait!" glared the judge, and others from the fabricating centre sprang toward the ship.

Savold managed to slam the airlock before Gam Nex Biad began to fight him, asking in frightened confusion, "What are you doing?" and locking their muscles so that Savold was unable to move.

"What am I doing?" glinted Savold venomously. "Getting off your lousy planet and back to a world where people live like people instead of like worms and moles!"

"I don't know what you mean," said the Dorfellow anxiously, "but I can't let you do anything until the authorities say it's all right."

"You can't stop me!" Savold exulted. "You can paralyse everything except my own arms!"

And that, of course, was the ultimate secret he had been hiding from Gam Nex Biad.

Savold slammed the take-off button. The power plant roared and the ship lifted swiftly toward the sky.

It began to spin.

Then it flipped over and headed with suicidal velocity toward the ground.

"They did something wrong to the ship!" cried Savold.

"Wrong?" Gam Nex Biad repeated vacantly. "It seems to be working fine."

"But it's supposed to be heading up!"

"Oh no," said Gam Nex Biad. "Our machines never go that way. There's no rock up there."

H. L. Gold

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Write, call, or telephone

In Science Fantasy No. 12 Mr. James proposed that one day in the future telepaths may be trained to solve labour problems. In the following story he uses an 'esper' police officer to unravel the partial breakdown of the moving Highways upon which the life-blood of the nation relies.

HIGHWAYMAN GREEN

By E. R. James

Illustrated by HUNTER

Summons came through to him strongly.

There were no words to it, only the compulsion to go. He pushed away his breakfast plate and the busy canteen around him faded from his awareness as he opened his mind. But there was still only the summons. It was urgent and it was coming from an adept, and he must not answer.

Emergency call. Any telepath within reach was to be at the Saskatch Drive-in on the Great Northern Highway at 9 hours G.M.T.

He could just make it. He doubted if any other Sneaker Policeman would do so in time. Telepaths were too few and too scattered throughout the services vital to the smooth running of civilisation.

Raw from the Mind Training College, he felt qualms because of his lack of field experience, but he stood up resolutely.

At the Report Desk of the Highway Control Station to which he had been so recently appointed, he let Sergeant Jock know that he was leaving on Special Duty.

"Aye?" nodded Jock with all the worldly wisdom of an old hand at fiddling time off. "Found you've got a date with a cute little lass, maybe?" And he winked at two other non-telepath patrol men, just in from the Highways.

They grinned broadly, half good-naturedly but half-maliciously too, for the police were just as human as the ordinary population and had the same prejudices against the new extraordinary minority.

And, although he was still new enough to the outside world to be oppressed by their attitude, Stan Green made himself grin back. He had to live with the rest of the world and in particular with these men—even though they tended both to fear and resent his extra-sensory-perception.

"I shall be away indefinitely," he told them, and he felt their resentment against him increase. Only by completely closing his mind or focusing it could he completely shut out the ESP emanations of their attitude.

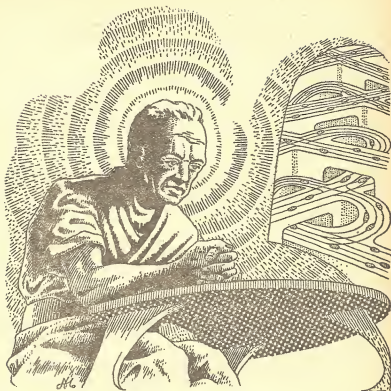
Outside the Station he climbed into his tracker, lowered its drag into the ratchet on the moving strip and was carried forward, on to the outer track of the Sheffield Bypass, falling in smoothly behind a heavy goods carrier. Quickly he shifted on to the second strip, and from that to ever increasingly faster strips, until he was moving on the inner track with the hurtling traffic typified by a luxury tracker in front and an express mail van behind him.

Aware of irritation esping from behind him, he briefly touched the mind of the mail driver, and recoiled from the contact. The man was seething with fury at some delay caused by a track breakdown. Stan grimaced. Such breakdowns were becoming more frequent.

Deliberately he shut out such ordinary things. And the summons took hold of his mind, drawing him with increased power, but formless as ever.

Lulled by the smooth motion, he allowed the sensations of the Highway to fill his mind. On his left, the secondary traffic fell back smoothly behind, the third line equally smooth but more rapidly backwards in comparison with his own velocity, and the fourth, fifth and the sixth fell back in regular 12 mile an hour drops in speed to the seventh, heavy goods lane that moved ponderously, considerably below him on its way towards the junction with the Great Northern Highway. Beyond that the trees and fields, houses and factories moved backwards swiftly in sympathy with his own 84 miles per hour.

And on his other side were the tracks carrying their traffic load in the other direction. A bare ten yards from him the opposing speed track carried the rush traffic at a speed equal to his own. Faint vibrations came through to him as trackers passed with a speed



relative to his own of 168 miles per hour. The other lanes beyond were out of his view.

Abruptly he shut it all out, as his sense of inadequacy gave him fresh forebodings.

Confidence comes chiefly from experience. Of actual duty he could boast no special trials such as he felt sure must lie ahead of him, but it was not the first time he had let his father's bearded image fill his mind and tell him—as though no years had passed and as though no grave had claimed John Gilbert Green—

“Usually the powers of Extra-Sensory-Perception are 10% an inherited sensitivity and strength of mind, 10% an upbringing

which does not strangle their development and 80% concentrated training and arduous mental exercise. But in your case—in spite of your dear non-telepath mother—you seem to have had more than 10% of the unusual mental power to start off with."

Of money his father had left him little; yet in the power and breadth of his mind he had a great legacy.

Strengthened by contact with the past—which with his trained memory and special ability was every bit as vivid as the present could be—he was drawn out of his reverie by an amber light winking its warning on the dashboard.

From the Highways plan on the tracker's steadily advancing roadmap, he selected his route and set the controls.

The tracker slowed, moving outwards on dividing strips, and swung around the banked curve of the complex junction, emerging on to the breathtaking sweep of the forty-strip width of the Great Northern Highway that was the artery feeding the veins of industry from Glasgow to New London.

At once he saw that no fewer than three of the heavy goods strips were stationary. A little further along the Highway several squads were at work. These pile-ups of traffic were hard to explain. The system seemed to be so foolproof.

He let his tracker move in to the 96 m.p.h. centre strip and hurtled south. Drawn by the summons, such faults were no concern of his.

In good time he set the controls and the tracker swung itself and came to a halt in the busy Drive-in. He remembered his interrupted breakfast and ordered coffee and sandwiches.

Three minutes after nine o'clock he felt another mind touch his, gently as a whisper might have touched his ordinary cars.

He replied with matching voiceless softness. "*Highwayman Stanley Green,*" and immediately he felt his mind perused as though it were an open book. His newness to duty caused irritation—and yet it might be a good thing; since being new he would not be known. His gun in its shoulder holster was of an old pattern, issued to him only as a matter of course on the backwater of the Bypass area, but at least it was a still serviceable weapon and it was comforting to know that he had looked after it, as well as doing his mental exercises with strict regularity. His father's lingering presence in his mind brought the only truly good response.

"*John Gilbert Green was a friend of mine in the old days, when we were struggling for our usefulness to be recognised,*" said the voice in his mind's ear. "*Live up to his memory!*" it exhorted him.

Then, like a flash, the other's mind opened to him in its turn. He

had been summoned by no less a person than Jan Korts, Chief Travelling Inspector to the Highways Corporation.

Korts, himself, had been summoned by Peter Sande, Chief Resident Advisor to the Corporation. Two of the four telepaths attached to the New London H.Q. of that great organisation had been murdered inexplicably. Sande, wounded by a third assassination attempt, had gone under cover. Korts was on his way to contact the sole remaining active telepath within the H.Q., Hal Vizard, at the Glebe Restaurant, mid-day tomorrow.

Stan Green was to go along as second man. The message to Korts had had to go by ordinary means because of the murder of his New London telepathic link. Since some definite and widespread plan seemed to be aimed at the entire Highways communication system, there was a chance that the message might have been intercepted.

"Are you ready?" asked the imperious thought of Korts.

Stan, with some mental doubt, signified his readiness.

Korts informed him: "*I am in the streamline, yellow and green tracker, licence P.442.THP. Watch for me to pull out and follow closely.*"

Stan caught sight of it almost at once, and hurried his own tracker in its gleaming wake.

Climbing swiftly into the centre of the Highway, they hurtled towards New London, separated only by some twenty yards and a single, rakish tourer. Stan's mind, open lest Korts should send him further instructions, picked up stray espings from the tourer's occupant. An airline breakdown had forced the woman to take the Highway, and she squirmed with an impatience further inflamed by a breakdown of the high speed strip in the Birmingham Sector.

More breakdowns: Stan found time to ponder their significance. Atomic energy providing cheap and limitless electric power had doomed the petrol, diesel and steam engines even before the anti-smog laws had come into force. Steam engines were now strictly museum pieces and the internal combustion engine useful only for aircraft and un-tracked farms. Air transportation, although still undeniably useful, could not compete with the moving strips of the new roads and Highways.

Mankind in crowded parts of the world had come to be dependent on the new, safe and effortless means of transport.

Stan leaned back in his seat, soothed by the security and smoothness of his tracker's onrush. With his controls set, he had nothing to do except keep an eye on the bright vehicle of Korts in front.

But he could not help thinking of those breakdowns. He had

been present at the investigation of some of them. There was always an accident rate in any industry. No matter how foolproof a system, there was always a human element to consider. An occasional faulty part might escape all the checking and inspections and be installed, and fail. Mistakes were inevitable, but until recently the Highways had been as perfect as anything could be.

The increased breakdown rate seemed to Stan like a disease. It definitely originated amongst the men who, picked for their efficiency and keenness, were responsible for the routine inspections. It was as though these travelling inspectors had suddenly begun to take an impish and often dangerous delight in deliberately doing things wrongly.

And, to make things more baffling than ever, they seemed only to suffer from occasional lapses. When their defection was revealed, they were themselves astonished. They seemed to have made their mistakes—silly mistakes that a child would not have made—as though they had meant to make them—and then quite forgotten having done anything of the kind.

Stan wondered if it was a kind of revolt of the mind when faced with near perfection. Could it indeed be a symptom of the machine age?—a kind of mental aberration which made a man try to blame machinery?—an illness of the age?

Perhaps life had become too easy and too secure—and this was the natural revolt of flesh and blood against being caught in one of its own creations?

Yes, it could be that . . . and yet Stan did not really believe that. No, in spite of all the evidence, he felt sure that there was some other underlying cause.

Something threatening, and evil . . .

Thoughts of other travellers kept straying into his mind out of the background of intentions that always tended to confuse him when he was near numbers of people such as moved on this thronged Highway.

Now he felt the marvelling of a negro chief at the complexity of the moving tracks. Now there was a girl from some small town eagerly looking forward to the luxury of a few days at the Grand Highways Hotel at the New London terminus of the Highway. And now there was a business executive whose journey had been uneventful bored to death . . .

Stan shifted his position on the comfortable seat. People travelling emitted more pleasant thoughts than unhappy ones. He felt content to let them touch his mind. It was no use worrying about the jungle of emotions which he must face in the great metropolis ahead.

It would be different indeed from the quiet life to which he had been growing accustomed since leaving the College. Amongst the people living around the Bypass, the undercurrents of frustration and bad feeling were nothing when compared with the scrambling hustle of the business nerve centre of the land . . .

Landmarks kept reminding him of this ordeal ahead. The Amptill Overhead, where a broad east-to-west Highway crossed the Great Northern, was over the horizon and seeming to gather speed towards him with every mile.

He sat up and peered ahead to see the famous Control Station of the Highways Police that was built into the banks of the Overhead.

And suddenly, quite unexpectedly, he felt stunned by a blast of emotion. He stared ahead. On the opposing speed strip, a man was standing up in an open speeder. In the man's hands and against his shoulder was a heavy rifle. Puffs of smoke whipped away from its muzzle. And the muzzle was pointing at the gaudy tracker of Korts just ahead.

Stan hit the alarm hooter of his tracker and, as it screamed, sent the whole weight of his mind against the blazing hatred that radiated from the man with the gun.

Immediately the hatred collapsed. The man took the rifle from his shoulder and stared at it. Stan could feel his horror and bewilderment. The man flung the rifle away and sank down on to the seat of his tracker.

The Highway screamed with warning hooters and Stan, in common with all other users, braced himself for the braking strain. It dragged at him like a ton weight and the entire width of the Highway ground to a halt.

He shook off his momentary dizziness and sprang out, running forward along the side of the stationary strip. He had to know what had happened to Korts.

No thought came to meet him; but he had to be certain. He took one look at the starred front of the Inspector's tracker, and dragged open the door.

Korts swayed sideways off the seat and slumped at Stan's feet, his head and shoulders a shattered red pulp.

Stan stared in horror. Irrelevantly a thought crossed his mind: this was a man whose mind had opened to mine, but whom I never met in the flesh; a fellow of my own kind who had known my father, and loved him as I did.

A great cold filling his mind, he turned away.

All around him the Highway was coming to life again, all except the speed strips gathering way, carrying on the restless traffic, that could never stop for long.

His arm was caught.

"Who're you?"

He stared dully at the policeman who had panted the question at him, then fumbled for his official badge.

"A sneaker?" The policeman's surprise was mingled with a faint disgust, and Stan pulled himself together.

"Yes," he replied. "He was one, too." He pointed back at Korts.

Cameras clicked as the police routine went into action.

Stan felt aloof from all the activity and, as his arm was released, he probed back along the strip to where the killer must be.

Horror! The man's mind was full of horror at what he had done.

Stan left the policeman staring after him, aware in spite of his concentration of the man's suspicion of one who, although just as much a law officer as any ordinary cop, could steal the thoughts from anyone's mind—perhaps to use as evidence. Even police had their off moments which they were not eager to have noised abroad. Stan shut out the man's vague guilt before it crystalized into any actual minor misdemeanour.

Police had reached the killer's tracker and were hauling him out without ceremony. Another policeman bringing back the murder rifle caught Stan's attention for a moment, as the sun glinted on metal.

Another policeman barred his way. "Hey! Where 're you going, mister?"

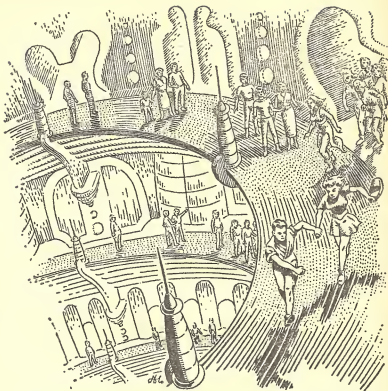
Stan showed his badge and the officer stood aside, staring uneasily.

They were clearing the strips. The killer was being marched towards the entrance to a pedestrian subway.

Stan followed, absorbing the complexity of the killer's thought:

What am I doing here? I had my elephant gun in my hands. How did it get there? Was it really I who had shot that brilliant tracker full of holes? What are these police treating me like a criminal for? I must have shot the tracker like that. But I don't remember it. I can't be guilty. I can't be guilty! I didn't do it? But what was my gun doing in my hands? I thought I'd left it at the hotel. I did leave it at the hotel. I'm sure I did. I'm innocent—

The man's mind was tottering on the brink of breakdown. Stan's anger at him softened. No human being could counterfeit such thoughts.



This, Stan began to feel, was similar to the "accidents" which were troubling the Highways system. He began to feed comfort, almost automatically, into the shaken man's thoughts, and their mad tempo slowed gradually.

By the time they were in the Control Station, the man was beginning to think of what he had done as being an incredible dream, beyond his control and due to be explained by his captors.

"What d'you make of it, sneaker?" asked the heavily built policeman who had stopped Stan earlier. "The man must be out of his mind. Or a fanatic. Nobody in their right senses would commit murder right outside our Station, now would they?"

It was a point in the man's favour, perhaps. Stan shrugged and forced himself to break his concentration to answer. "Korts was

half-expecting trouble when we started out. But that doesn't explain this . . . I don't know what to make of it."

He listened to the evidence and the charge that was read against the man. He was a well-to-do landowner, of an aristocratic family, much travelled, a regular competitor at the Bisley shooting competitions and, now that he had calmed, was like a rock in his protestations of innocence. With his crisp hair, greying slightly at the temples, his clear blue eyes, strong face and athletic body it was difficult not to believe him.

Stan added his evidence of the man's state of mind to the official record and left the station full of a confusion of thought that affected him even as his tracker slipped itself smoothly between the slower traffic towards the speed strip.

The skyline of New London was coming over the horizon to rush towards him before he had come to any conclusion of his own. He forced his mind to clear, preparing himself to meet the nerve-racking background of thought that even then began to creep into his mind from the thickening houses along the Highway. He must not block it off for the effort would weaken him; he must make himself accept it, instead of fighting against it.

All the same, he was very much aware of the pressure of human life in the metropolis as he left his tracker to park itself in a subway.

Putting the parking disc in his pocket, he felt blinded by the waves of varied impressions that beat at him from all sides. He had felt something like this when he had first left the college for the outside world, but this was worse than anything he had imagined.

The flashing skysign of the Grand Highways Hotel caught his eyes, seeming much as a beacon would have done to a sailor in a rough, unknown sea, and he headed for it rather desperately.

"New in the City, sir?" asked the desk clerk with a smile.

Stan, signing the register, nodded.

"Just a moment, sir," said the clerk.

Stan looked up in a vague surprise as he sensed, rather than saw a door opening across the entrance hall.

A short, very fat man hurried towards him, beaming a welcome. "I am the manager. Julius Heddon." The fat man glanced at the register. "Mr. Stanley Green. We're delighted to have you here, with us. We pride ourselves in giving perfect service to all those who use the Highways." He snapped his short, fat fingers and a bellboy came running.

It was always a temptation to delve into the mind of any unusual character, such as this manager dedicated to his work; but an idle

desire to discover what made a man tick was not a good enough reason to violate personal privacy.

Stan had to declare that he had no luggage for the boy to carry, and he was directed to an arcade of shops within the hotel.

Prices, however, took his breath away.

He went out to make a few purchases for his overnight stay. Meandering through the crowds swarming around him on the moving pavements was practice, helping to harden himself against the pressure of continual mass espings. The sparkling buildings of the Atom Age took his breath away. But the prices—

"It's the rising transport costs," apologised a shopkeeper where he finally bought a shirt and pyjama suit. "It's almost too expensive to die these days!"

On the way back to the hotel, Stan sampled the minds of passers by. Almost every mind he touched was hounded by the rocketing cost of living resulting from the transport breakdowns. It was an object lesson in the dependence of civilisation on the Highways.

He wondered what Hal Vizard would have to say to him at their meeting tomorrow mid-day. Perhaps there would be some explanation of all this. But meanwhile he was very tired.

Hotel service indeed left nothing to be desired. After a snack and hot drink brought to his room, he went straight to bed, and slept deeply.

Rising early and much refreshed, he passed the morning memorising the street plan of the great shopping centre of the City.

At the Glebe Restaurant in good time, he sat with a cup of coffee waiting for the experienced telepath to contact him and suffering the undercurrent of espings coming from the other patrons as best he could.

There was one other man sitting alone quite close to him. Perhaps he was Hal Vizard; but Stan waited to be contacted while he studied the man.

A tall man, broad shouldered, not too well tailored—telepaths did not like to be conspicuous—with a long jaw, ascetic mouth and bright eyes under straight brows of a darker colour than the fair hair that was like a lion's mane—

Stan sensed the man's mind reaching out cautiously, half-expecting to be disappointed. He answered the call at once, eagerly. Their minds met and Stan knew that Vizard was frightened—not for himself, but for the Highways—and for the civilisation of mankind that depended on those Highways.

The feeling suddenly changed into confusion. Hal lifted his slightly bowed head and his eyes opened wide in alarm that came through to Stan's mind like an icy blast.

Hal's long-fingered hand clutched at the gun in his shoulder holster.

Stan felt his fellow telepath's powerful mind focus in the direction of his staring eyes.

A girl had come in. Stan felt fury radiate from her. He felt momentarily stunned by contact with her mind. Hal's gun was coming out of its holster. The girl was holding her handbag in line with her slender waist, one hand inside it.

Smoke puffed faintly from the leather of the bag. Sharp reports of her firing smacked through the restaurant noises.

Hal's gun slipped from his hand, clattered across a nearby table and on to the floor. He had half risen and clutching his chest fell awkwardly over the back of his chair.

That he was dead, Stan knew from the sudden blankness of his mind. Stan's own gun was half drawn from its place under his armpit—

Then the girl screamed into the sudden silence. She stumbled backwards, staring at the sprawling corpse.

Her thoughts hammered at Stan, like the delirium of nightmare: *A man has been shot! I have a gun in my hand in my handbag—* It was like the shocked man on the Great North Road, all over again. She had never killed anything before in her life, however. But she had been taught by a brother, an amateur marksman—how to use a gun—and had brought it to the City with her. She had left it in her hotel. She remembered that quite clearly. Yet here it was in her hand. And a man was dead. Fumes from the shots were acrid in her dainty nostrils.

Pandemonium broke loose around them. People did not realise the girl's guilt. Stan's mind caught hold of hers, urging her to get away, pulling her eyes around to look at him and recognise him as a friend..

She stumbled towards him, blindly in her panic. To guide her was easy, since she was so anxious for guidance.

He caught her hand outstretched to him. "Come on! Got to get out of here!"

Easier said than done. Everyone else had the same idea. Self-preservation. Stan flung his mind forward, fanning the fears of the patrons, suggesting that menace rushed at them from behind.

People turned, screaming and pushing, in panic. He pulled the girl after him down a magically appearing lane.

Sunlight suddenly warmed them and they were on a moving pavement, already in some confusion because of outrushing people.

He drew her into a sidewalk cafe, to an empty corner table. "Sit down."

"Who are you?" she asked suspiciously, now that her first panic had gone and given her back control of her thoughts. But she seated herself. She suddenly realised she still held her handbag, and pushed it away from her with a shudder.

He studied her thoughtfully. She looked very young, smart and tasteful in a not-too-expensive way. Her soft brown eyes regarded him doubtfully. Her hair was disordered, and she lifted her hands to it automatically as he looked at it. She was very pretty—dainty was the word, perhaps.

He fed reassurance into her mind and her composure increased. "Who are you?" she asked softly.

He leaned across the table. "My name's Stan Green. I'm a sneaker policeman of the Highway Patrol."

"Highway patrol . . . A sneaker—" She covered her small mouth with a slender hand. "You're one of—you can read my thoughts?"

"Yes." He hesitated. "Right now you're thinking that I'm a presentable young man—and you wish you'd met me in a more ordinary way."

"Oh!" A flush suffused up from her white neck. She looked away, out through the café window.

Stan suddenly noticed that the place was empty except for themselves. Their ignoring of the commotion outside was making them conspicuous.

"We ought to get well clear," he murmured. He studied her. "Where are you staying?"

"The Grand Highways Hotel."

"So am I," he said with a faint surprise. "We could talk in the lounge there, perhaps. Will you come back with me?"

"I—" She stared at him piteously. "Oughtn't I to go to the police?"

"They'd only arrest you," he said. "I want to help you—and—" He let his face harden as he felt her hesitation. "Since you've killed the man I had come to New London to meet, perhaps you can help me. And God knows I need any help I can get."

Tears made her eyes swim; then she swallowed hard. "Anything you say."

They did not speak again until they sat in the lounge. It was almost deserted at that time of day and they found privacy in a corner beneath a palm.

"What d'you want me to do?" she asked.

He reached across the table and took her hand. How cold it was! She returned his grip eagerly.

"I'll do anything!" she declared.

He nodded. "Good!" Briefly he told her of his being summoned by Korts, of the little that Korts had been able to tell him, and of his own experience of the Highway breakdowns, and of the fears of both Korts and the man she had murdered so strangely. "In a war," he said, "an enemy tries to knock out his opponent's communications. Without proper transport an army is paralysed. I'm beginning to think that somebody is trying to paralyse our country—Perhaps they're going to attack us—Whatever they're trying to do, we've got to stop them, somehow."

"But how can I help you?"

"Don't you see?" he reassured her. "You're my only link with them. Somehow, unknown to you—don't ask me how at the moment—someone has drilled into your mind a fixation—a temporary lapse from sanity—so that as soon as you saw Vizard you reacted in a way quite foreign to you. You instinctively hated him, so much so, that you had to kill him."

"Oh dear!" She bit her lip. "The police wouldn't think much of that for a story, would they?"

"No. That's why we haven't gone straight to them."

"How dreadful! That poor man! Oh—" Her wide eyes implored him to help her.

He leaned closer to her. "If you'll really trust me, I might be able to discover when and how this instinctive reaction to do murder was implanted in your mind."

She stared at him.

"I'm a sneaker," he reminded her. "I can look into your mind. But to get into the depths of your memory and perhaps to see something which you have been told to forget, I'll have to have your co-operation. You must relax, and you must want me to come to into your mind. It's not easy for a non-telepath . . ."

"Try me," she invited.

He took hold of her mind and was reassured by her eagerness to help him. Everyone's mind has a flavour of its own. In the sweetness and gentleness of hers, he was reminded of a spring day—sunshine, and soft breezes and newly opened flowers.

Her father was a technician living in tropical Africa. He had brought her home with him on a six-month vacation. They had had a wonderful time, but it was nearing its end now. He had gone into the industrial north to make business contacts, leaving her to shop in London until he joined her for their flight south.

She had stayed at the hotel and done her shopping and seen a few shows and done some sightseeing. But she had done all these things on her own. Try as Stan would he could find no time when she might have been under the influence of anyone capable of implanting a compulsion to do murder.

"I can't understand it," he said, baffled. "You must have been unconscious at some time, for the thing to be done. But when? Didn't you make any friends at all?"

She shook her head. "The people I know are all in the Midlands. I didn't feel like letting anyone pick me up here?"

"I can imagine some tried," he said, and felt her memories stir. But she had, he was certain, always repulsed such advances. When could anyone have got at her mind?

His own mind, coming out of its concentration upon hers, felt a beam of thought—a quite strange but strong beam of thought beckoning him.

A summons. A compulsion to get up and go, such as could come only from another telepath. And it was urgent, and from an adept—not a novice such as he was.

Immediately he answered, declaring himself.

"*I am Pete Sande,*" came the answer. "*I am in the Manager's Office of this hotel. Come at once! I need you desperately.*"

Stan stood up, pushed his chair away, and ran. He felt the girl's amazement and, not wishing to lose contact with her, mentally urged her to follow him. Feeling her respond, he raced out of the lounge, pushed his way across the Reception Hall and thrust open the door of the Manager's Office.

The Manager, Julius Heddon, fat and urbane, was on his feet behind the curved back of a huge, ornamental desk. One plump hand was on the desk almost touching the butt of an automatic pistol, and his bright, intense eyes stared at another man standing with a gun in his right hand.

The left arm of the standing man was in a sling and his face looked strangely crooked, although it was shaded by a hat pulled well down.

"Shut the door!" snapped Julius Heddon.

The girl pushed in behind Stan, choked as she stifled the beginning of a scream.

"Shut the door," Stan told her.

She did so.

A quick thought came from the gunman. "*Can't relax my attention on this fat man. He's the cause of everything.*"

Stan stared at Heddon's flabby face in amazement.

The Manager did not take his eyes off the lean, wounded figure of Pete Sande, but he spoke to Stan.

"You another of these Human Telepaths?"

"Yes," Stan tried to break into the fat man's mind, but its cold, inhuman determination—steam-roller determination blocked him. "What are you?"

"That doesn't matter." There was an alarming confidence in the smile that creased the huge cheeks but did not touch the cold eyes. "But I would like to tell you both of what I have been successful in doing. I am a test case. Because I have been successful, my kind are certainly going to invade your planet. I have shown that you humans can be made to wreck your own economy, so that the invasion will be easy. By means of simple drugs and hypnotic suggestion while people sleep unsuspectingly, other of our agents will soon be turning thousands of travellers into perfect saboteurs. All the important people of the world pass through such hotels as this one. We can turn them into wreckers or murderers in a single night!"

"So that's it!" Stan reached for the gun in his shoulder holster. "You—you won't get away with it."

"I shall!" Heddon laughed in mockery, so that Stan hesitated with the drawn gun in his hand.

Was this being able to survive a bullet?

Could he—or it—survive the fate which its scheming had brought to four human telepaths—and to the victims of planned accidents up and down the country?

Heddon's face froze into a threat and Stan braced his mind to resist unknown attack.

"Your friend, Mr. Sande, is wearing a synthetic face—a mask, to disguise himself from any attack I may have devised against him," said Heddon.

Stan schooled himself to shoot the thing that posed as a man, upon the first sign of anything wrong; but he had to hear whatever was about to be said. He could not help himself.

"Sande," said Heddon with a fantastic triumph vibrating in his voice, "has an olive complexion. His forehead is high and broad. His nose is large and hooked. His mouth is thin and ascetic from long denial, like yours . . ."

A wave of uncontrollable hatred boiled up in Stan's deepest being, coming like a monster rushing out of his subconscious.

"His chin," snapped Heddon, "is square and the line of the bone is plain against the skin. You hate him, don't you?"

Blinding rage swamped Stan's consciousness. Although his

trained mind fought against it with a power greater than any ordinary human could muster, the fury exploded over it.

He must kill! He must!

Strive as he would—

He must kill! There was no alternative. He gave way to the compulsion, suddenly, consciously. He had to keep his control of himself, no matter what happened.

He felt the gun kick, heard the crash of its shot in the confined space of the office, smelt the fumes rising, saw Pete Sande stagger with the impact of the big, old-fashioned bullet, and fall. And he heard Heddon shout for the police—as the bogus Manager would, so that he could dispose of both of them—as murderer and murdered—

The red rage immediately left him, and he shivered.

He looked down at the gun in his hand and almost flung it from him.

Almost—

But he did not. Across the desk Heddon was staring at him with wide, terror-stricken eyes. In front of him Sande, masked and motionless, still stood, unharmed.

"No!" gasped Heddon. "You must kill him. You must!"

"I've done so," said Stan coldly, pulling himself together. "You forgot one thing, whatever you are. A Telepath's imagination is as strong to him as any reality can be. No you don't—"

Heddon had clutched up the automatic from his desk top.

The guns of Sande and Stan filled the office with noise. Heddon's gun fell from his nerveless fingers and he crumpled.

"Blast!" said Sande. "We really wanted him alive . . ."

Stan followed him around the edge of the desk and they stared down. Sande knelt and touched the face. "A mask," he said. "We'll let the ordinary police take it off and handle things from now on."

He stood up and went to the door as it opened to show the apprehensive face of the desk clerk looking in. "Call the police." He showed his official badge.

Stan felt the girl's horror touch his mind, and he turned to her. "It's going to be all right, now."

"Is it?" she said in a hoarse little gasp.

He took her hand. "Really it is, Lizbeth. Perhaps—if you've some days left in this country—I could help you to forget—take you around a bit?"

"You—" She stared at him, panting a little. "You never asked my name. How did you know—"

"I read—" He felt suddenly miserable. "Never mind," he murmured. "Your father will be coming for you, soon. It really is all over." He squeezed her fingers, reassuringly, and left her mind alone.

What ordinary girl would think of romance with a man who could always know what she was thinking about?

E. R. James

THE LITERARY LINE-UP

The finalised statistics on our recent *Survey* are now almost complete and will be published in a forthcoming issue together with an analysis of the readers and our own editorial reaction. One particularly significant fact is that our serials, despite their high quality, have only been placed third—novelettes being far more popular, although there is a reason for this apparent paradox.

We shall therefore endeavour to publish more stories of novelette length and next month's issue is an encouraging start. There is another James White story, "Boarding Party," taking place in deep-space and not quite the type of plot the title would lead one to assume; there is also a long story by celebrated American author Poul Anderson whose visits to this country endeared him to Londoners in recent years, and Robert Sheckley returns with a powerful short backed by several other regular authors.

On the article side there is a particularly satirical explosion from Eric Frank Russell which will undoubtedly make most astronomers reach for their shotguns!

Story ratings for No. 33 were :

- | | | | | | | |
|------------------------|----|----|----|----|----|-------------------|
| 1. Manna | .. | .. | .. | .. | .. | John Christopher. |
| 2. The Star Walk | .. | .. | .. | .. | .. | James White. |
| 3. The Veterans | .. | .. | .. | .. | .. | Norman Dale. |
| 4. Ephemeral This City | .. | .. | .. | .. | .. | Francis G. Rayer. |
| 5. Logical Deduction | .. | .. | .. | .. | .. | Gavin Neal. |
| 6. The Active Man | .. | .. | .. | .. | .. | Sydney J. Bounds. |

Speculation as to whether there are more than nine planets in our Solar System has gone on for many years. In this short article Mr. Malcolm discusses recent investigations into the problem.

A TENTH PLANET ?

By Roy Malcolm

Is there a tenth planet in the Solar System ? This question has exercised the minds of astronomers ever since the ninth planet, Pluto, was discovered in 1930. But let us start at the beginning, in 1781 to be precise. On that date, William Herschel discovered Uranus. His discovery was accidental, as he believed he had found "a comet without a tail." However, it was soon verified that the new body was a planet, not a comet. Herschel was knighted for his discovery. It was noticed that the big green world was a bad timekeeper—sometimes it was ahead of its predicted orbital position, at other times it was behind it. From this observation arose the theory of a planet beyond Herschel's world, causing perturbations in the Uranus orbit. The legend of the tenth planet had its foundations here, as we shall see.

The year 1846 marks the next advance in the history of planetary discovery and another puzzle was presented to the astronomers of that time. With the theory of another planet in mind, two mathematicians, Adams of Great Britain and Leverrier of France, had calculated the position of the unknown body. The Frenchman published his results only to find, much to his chagrin, that he had a rival for the glory of

discovering a planet. Adams had taken his results to the Astronomer Royal, Sir George Airy, who had filed them away and promptly forgotten them. When Leverrier's figures came out, Sir George Airy remembered the Briton's results (which were in agreement with Leverrier's), published them and had the courage to admit his oversight. After a good deal of acrimonious dispute between men of science on both sides of the channel, it was agreed that the glory of this planetary discovery should be equally divided between Adams and Leverrier.

It was a triumph of mathematics. The new planet was named Neptune. But—it was found that Neptune did not account for the disturbances of the Uranus orbit! The astronomers sat back, perplexed. Could there possibly be *another* world beyond emerald Neptune? Nothing of note was accomplished until the turn of the century when the American, Professor Lowell, began research based on the discrepancies between the predicted and the observed positions of Uranus. The search came to fruition on March 13th, 1930. Clyde Tombaugh, of Lowell Observatory, was examining photographs taken in January 1930, when he detected the ninth planet.

It was named Pluto, a most suitable choice, since in mythology, Pluto is the ruler of the nether world, and in addition the symbol PL for the planet represents the initials of Percival Lowell. At a distance of 3,600 million miles from the Sun, Pluto moves once round Sol in 248 years. We know very little about the planet. Indeed, it was only in 1950 that Kuiper, using the great 200-inch Hale telescope at Mt. Palomar, managed to measure directly its diameter. In no other telescope is the image large enough to show a measurable disc. The measurements, setting Pluto's diameter at 3,600 miles, thus making it considerably smaller than the Earth, raise a problem.

In order to account for its pull on Uranus, its density had to be about fifty times the density of water, an improbably high figure. So, was this a case of the wrong body in the right place? In other words, was there yet another planet beyond small, frozen Pluto?

However, before leaving Pluto it is interesting to consider what conditions are like at this distance from the Sun. If a spaceman stood on the surface of the planet, Sol would appear as a brilliant pin-point arc-lamp, as seen from a few yards distance. As a source of heat, however, it would not amount to much, so that the surface temperature of Pluto is probably about -230°C , a temperature so low that most gases (by terrestrial standards) will have been precipitated as snow.

If the spaceman looked for the other planets, he would not see them as well as he could from the Earth. Jupiter and Saturn might be visible as (rather faint) naked-eye stars. Venus and the Earth would

be visible only if the Sun's light was blotted out, since these planets would never appear more than 2° from the Sun. The remaining planets might be observed photographically. If its density is about fifty times that of water, the value of gravity at the planet's surface should quadruple our spaceman's weight. So it looks as if a spell of duty in the future at Pluto Base will be a pretty bleak affair. Unless, of course, there *is* a tenth planet, thus avoiding the necessity of making Pluto's density so improbably high.

From time to time in the world's press, ever since the discovery of Pluto in 1930, reports have been published of the discovery of the tenth planet. For example, the following report appeared in September 1953, headed :

It may be the Tenth Planet.

"Discovery of an object in the sky that may be a comet, an asteroid or even the long-sought 10th planet was announced yesterday by Harvard Observatory.

"It will take a lot of observations to establish just what this object is, how big it is and how far away from the earth it is located," Dr. Frank Orrall, of the Observatory, said. 'It was first sighted by astronomer, S. Arend, who notified Copenhagen Observatory on September 1st. The cable identifies the object as a planet.'"

This seemed worth following up so the present author contacted the observatories at Copenhagen and at Harvard. The Danes sent official circulars detailing the most recent research done on the new body. The elements showed it to be a fast moving asteroid, since named Arend, with a highly elongated orbit.

Evidence from other sources also weighs heavily against the tenth planet theory. About twenty-six years ago, Professor E. K. Opik calculated that the effects of stars on the planets of our system were negligible. Again, a recent investigation of the orbit of Uranus made at the Nautical Almanac Office in Washington shows that, after allowance is made for the perturbations by the other planets, the observations of Uranus are so closely represented by the predictions that there is no particular indication of a tenth planet.

The work of Lowell, Gaillot and others, using the methods of celestial mechanics, show that if there were a planet as large as Neptune within twice Uranus's distance, or even one as large as Jupiter within two-and-a-half times Neptune's distance, its disturbances on Uranus would have been detected. Hence no 10th Planet exists unless it is considerably smaller.

Should someone wish to search for a body beyond Pluto—despite the conclusive evidence—is there any principle or law which might

help him? Many laws have been advanced which profess to show that the distances of the planets from Sol conform to some law. The best known is Bode's Law, published by the German in 1772.

If we take the numbers : 0, 3, 6, 12, 24, 48, 96, 192, 384, 768—each of which is double the preceding (the second excepted) and add to each the number 4, we obtain : 4, 7, 10, 16, 28, 52, 100, 196, 388, 772. The actual distances of the planets from the Sun, taking the radius of the Earth's orbit as 10, are : 3.87, 7.23, 10, 15.23, 23.7, 52.03, 95.39, 191.83, 300.37, 390. Mercury, Venus, Earth, Mars, the Asteroids, Jupiter, Saturn and Uranus conform closely to the positions as indicated by Bode. However, the actual positions of the two outer planets, Neptune and Pluto, show that the German's Law is not infallible. Adams and Leverrier, who had assumed the mean distance of the body disturbing the orbit of Uranus to be that given by Bode's Law, found this out when Neptune was discovered.

Incidentally, the wide difference between the actual distance of Pluto from Sol, and Bode's distance, may lend weight to the theory that Pluto is not a planet, but a renegade moon which had broken free from a major planet's influence. Littleton, the English astronomer, has worked out the possibility that Pluto was once a third moon of Neptune, and it is remarkable that Pluto's eccentric orbit at times brings it nearer the Sun than Neptune.

If we extend Bode's Law to include our hypothetical 10th planet, its position would be 1540 ($1536 + 4$), but the wide variation in the sets of figures for Neptune and Pluto seem to show that Bode's Law is inapplicable to planets too far from the primary.

With the evidence weighing heavily against the existence of a tenth planet, it seems that Pluto will remain the outpost of the Solar system.

Roy Malcolm

Science fiction is not necessarily all conflict in space although the background of interstellar distances can be used to excellent advantage, as Robert Sheckley did in "The Odour of Thought" in No. 25. Brian Aldiss, comparatively new to this specialised medium, is fast becoming one of the few British writers who can successfully utilise this fascinating technique.

OUR KIND OF KNOWLEDGE

By Brian W. Aldiss

It was a glorious day to explore the Arctic Circle. The brief and violent spring had exploded over the bleak lands with a welter of life. The wilderness was a wilderness of flowers. Flocks of tern and golden plover, with the world to sport in, stood here leg deep in blossom. Acres of blue ice crocus stretched away into the distance like shallow pools reflecting the clear skies. And on the near horizon rose a barrier of snow-covered mountains, high and harmless.

Five of them constituted the exploring party, the Preacher, Aprit, Woebee, Calurmo and Little Light, the Preacher being ahead as usual. They moved to the top of a rise, and there was the valley stretched before them, washed and brilliant. There too, was the spaceship.

Calurmo cried out in excitement and darted down among the flowers. The others saw instantly what was in his mind and followed fast behind, calling and laughing.

To them it was the most obvious feature of the colourful plain. Calurmo touched it first, and then they crowded round looking at it. The Preacher bent down and sniffed it.

"Yes," he said. "Definitely wood sorrel: *Oxalis acetosella*. How clever of it to grow up here." His thoughts held a pious tinge; they always did: it was for that he bore the name Preacher.

Only afterwards did they notice the spaceship. It was very tall and sturdy and took up a lot of ground that might more profitably have been used by the flowers. It was also very heavy, and during the time it had stood there its stern had sunk into the thawing earth.

"A nice design," Woebee commented, circling it. "What do you think it is?"

High above their heads it towered. On the highest point sat a loon, preening itself in the sun and uttering occasionally its cry, the cry of emptiness articulate. Round the shadowed side of the ship, a shrivelled heap of snow rested comfortably against the metal. The metal was wonderfully smooth, but dark and unshining.

"However bulky it is down here, it manages to turn into a spire at the top," the Preacher said, squinting into the sun.

"But what is it?" Woebee repeated; then he began to sing, to show that he did not mind being unaware of what it was.

"It was *made*," Aprit said cautiously. This was not like dealing with wood sorrel: they had never thought about spaceships before.

"You can get into it here," Little Light said, pointing. He rarely spoke, and when he did he generally pointed as well.

They climbed into the airlock, all except Calurmo, who still stooped over the wood sorrel. Its fragrant pseudo-consciousness trembled with happiness in the fresh warmth of the sun. Calurmo made a slight churring noise, persistent and encouraging, and after a minute the tiny plant broke loose of the soil and crawled onto his hand.

He brought it up to his great eyes and let his thoughts slide gently in through the roots. Slowly they radiated up a stalk and into one of the yellow green trefoils, probing, exploring the sappy being of the leaf. Calurmo brought pressure to bear. Reluctantly, then with excitement, the plant yielded, and among its pink-streaked blossoms formed another, with five sepals, five petals, ten stamens and five stigmas, identical with the ones the plant had grown itself.

The taste of oxalic acid still pleasant in his thoughts, Calurmo sat back and smiled. To create a freak—that was nothing; but to create something just like the originals—how the others would be pleased!

"Calurmo!" It was Aprit, conspiratorial, almost guilty. "Come and see what we've found."

Knowing it would not be as delightful as the sorrel, nevertheless Calurmo jumped up, eager to share an interest. He climbed into the air lock and followed Aprit through the ship, carrying his flower carefully.

The others were drifting interestedly round the control room, high in the nose.

"Come and look at the valley!" invited Little Light, pointing out at the spread of bright land which shone all round them. From here, too, they could see a wide river, briefly shorn of ice and sparkling full of spawning fish.

"It's beautiful," Calurmo said simply.

"We have indeed discovered a strange object," remarked the Preacher, stroking a great upholstered seat. "How old do you think it all is? It has the feel of great age."

"I can tell you how long it has stood here," Woebee said. "The door through which we entered was open for the snow to drift in. When the snow melts it can never run away. I scanned it and the earliest drops of it fell from the sky twelve thousand seasons ago."

"What? Three thousand years?" exclaimed Aprit.

"No. Four thousand years—you know I don't count winter as a season."

A line of geese broke V-formation to avoid the nose of the ship, and joined faultlessly again on the other side. Aprit caught their military thoughts as they sailed by.

"We should have come up this way more often," said Calurmo regretfully, gazing at his sorrel. The tiny flowers were so very beautiful.

The next thing to decide was what they had discovered. Accordingly, they walked slowly round the control room, registering in unison, blithely unaware of the upper-level reasoning that lay behind their almost instinctive act. It took them five minutes, five minutes after starting completely from scratch: for the ship represented a fragment of a technology absolutely unknown to them. Also, it was a deep-spacer, which meant a corresponding complexity in drive, accommodation and equipment; but the particular pattern of its controls—repeated only in the few ships of its own class—designated unfailingly the functions and intentions of the vessel. At least, it did to Calurmo and party, and as easily as one may distinguish certain features of a hand from finding a lost glove.

Little surprise was wasted on the concept of a spaceship. As Aprit remarked, they had their own less cumbrous methods of

covering interplanetary distances. But several other inferences fascinated them.

"Light is the fastest thing in our universe and the slowest in the dimension through which this ship travels," said Woebee. "It was made by a clever race."

"It was made by a race incapable of carrying power in their own bodies," said Little Light.

"Nor could they orient very efficiently," the Preacher added, indicating the astro-navigational equipment.

"So there are planets attending other stars," said Calurmo thoughtfully, his mind probing the possibilities.

"And sensible creatures on those planets," said Aprit.

"Not sensible creatures," said Little Light, pointing to the gunnery cockpit with its banks of switches. "Those are to control destruction."

"All creatures have some sense," said the Preacher.

They switched on. The old ship seemed to creak and shudder, as if it had experienced too much time and snow ever to move again.

"It was content enough without stars," muttered Woebee.

"Rainwater must have got in the hydrogen," Aprit said.

"It's a very funny machine indeed to have made," said the Preacher sternly. "I don't wonder someone went away and left it."

The boredom of manual control was not for them; they triggered the necessary impulses directly to the motors. Below them, the splendid plain tilted and shrunk to a green penny set between the white and blue of land and sea. The edge of the ocean curved and with a breath-catching distortion became merely a segment of a great ball dwindling far beneath. The further they got, the brighter it shone.

"Most noble view," commented the Preacher.

Aprit was not looking. He had climbed into the computer and was feeding one of his senses along the relays and circuits of the memory bank and inference sector. He clucked happily as data drained to him. When he had it all he spat it back and returned to the others.

"Very ingenious," he said, explaining it. "But built by a race of behaviourists. Their souls were obviously trapped by their actions, consequently their science was trapped by their beliefs; they did not know where to look for real progress."

"It's very noisy, isn't it?" remarked the Preacher, as if producing a point that confirmed what had just been said.

"That noise should not be," said Calurmo coolly. "It is an alarm bell, and indicates something is wrong."

The sound played about them unceasingly until Aprit cut it off. "I expect we are doing something wrong," he sighed. "I'll go and see what it is. But why make the bell ring here, and not where the trouble is?"

As Aprit left the control room, Little Light pointed into the huge celestial globe in which the stars of the galaxy were embalmed like diamonds in amber. "Let's go there," he suggested, rattling the calibrations until a tangential course lit up between earth and a cluster of worlds in the centre of the galaxy. "I'm sure it will be lovely there. I wonder if sorrel will grow in those parts; it won't grow on Venus, you know."

While he spoke he spun the course integrator dial, read off the specifications of flight, and fed the co-ordinates as efficiently into the computer as if he had just undergone the (customary) two-year training course.

Aprit returned smiling.

"I've fixed it," he said. "Silly of us. We left the door open when we came in—there wasn't any air in here. That was why the bell was ringing."

They were picked up on Second Empire screens about two parsecs from the outpost system of Kyla. An alert-beetle pinpointed them and flashed their description simultaneously to Main Base on Kyla I and half-a-dozen other interested points—a term including the Needle Fleet hovering two light years out from Kyla system.

Main Base to G.O.C. Pointer, Needle Fleet 305A: *Unidentified craft, mass 40,000 tons, proceeding outskirts system towards galaxy centre. Estimated speed, 20 S.L.U. Will you intercept?*

G.O.C. Pointer to Main Base, Kyla I: *Am already on job.*

Main Base to G.O.C. Pointer: *Alien acknowledges no signals, despite being called on all systems.*

Pointer to Main Base: *Quiet type. Appears to be heading from region Omega Y76 W592. Is this correct?*

Main Base to Pointer: *Correct.*

Pointer to Main Base: *Earth?*

Main Base to Pointer: *Looks like it.*

Pointer to Main Base: *Standing by for trouble.*

Main Base to Pointer: *Could be enemy strategem, of course.*

Pointer to Main Base: *Going in. Out.*

Officer Commanding needleship *Pointer* was Grand-Admiral Rhys-Barley. He was still a youngish man, the Everlasting War

being very good for promotion, but nevertheless thirty-four years of vacuum-busting lay behind him, sapping at his humanity. He stood now, purple of face under 4G's, peering into the forward screens and snapping at Deeping.

Confusedly, Deeping flicked through the hand-view, trying to ignore the uniform that towered over him. On the hand-view, ship after ship appeared, only to be rejected by the selector. Here was trouble: the approaching alien, slipping in from a quarantined sector of space, could not be identified. The auto-view did not recognise it, and old records were being checked on the hand-view; they, too, seemed to be drawing a blank.

Sweating, the unhappy Deeping glanced again at the image of the alien. Definitely not human; equally definitely, not Boux—or was it an enemy ruse, as Base suggested? The *Pointer* was only half a parsec away from it now. They were within hitting distance, and the unidentified craft might hit first.

Fear, thought Deeping. My stomach is sick of the taste of fear: it knows all its nuances, the numb terror of man's ancient enemy, the Boux, the object dread of Rhys-Barley's tongue. He flicked desperately. Suddenly the hand-view beeped.

The Grand-Admiral pounced, struck down the specifier bar and pulled out the emergent sheet. Even as he read it, a prolonged scrunching sound from the bowels of the ship announced that traction beams from *Pointer* and a sister-ship had interlocked on the speeding alien. The gravitics wavered for a moment under the extra load and then came back to normal.

"By Vega!" Rhys-Barley exclaimed, flourishing the flimsy under Captain Hardick's nose. "What do you make of it? Tell Intake to go easy with our prize out there; they've got a bit of history on their hands. It's a First Empire ship, built something like four thousand seven hundred years ago on Luna, the satellite of Earth. Windsor Class, with a Spannell XII Light Drive. Ever hear of a Spannell Drive, Captain?"

"Before my day I'm afraid, sir."

"Deeping, get Communications to have Kyla I send us details of all ships of Windsor Class, dates of obsolescence, etc. I think there's something queer . . . Where'd it come from, I'd like to know."

Interest made Rhys-Barley hop in front of the screens with less dignity than the Grand-Admiral usually mustered. Deeping relaxed enough to wink covertly at a friend on Bombardment Panel.

The alien was already visible through the ports as a gleaming ship a mile away, its terrific velocity killed by the traction beams.

Now the tiny alert-beetle which had first discovered it made towards the *Pointer*. It gleamed pale red, scarcely visible against the regal profusion of Central stars. A beetle from the *Pointer* shot out to meet it bearing a cable. The beetles connected and floated back across the narrowing void. They touched the Windsor Class ship and instantly it was surrounded by the pale amber glow of a force shield.

Everyone on the *Pointer* breathed more easily then. No energy whatsoever could break through that shield.

"Haul her in," the Captain said.

Intake acknowledged the order and gradually the little ship was drawn closer.

Rhys-Barley cast an eye again at the encephalaphone reading on the bulkhead panel. Reading still "Nil." But the Nil wavered as if it was unsure of itself. Maybe they had caught a dead ship; thought waves should have registered before now, whether Boux or human.

Tension heightened again as the alien was drawn aboard. Matching velocities was a tricky business and the manoeuvre always entailed a deal of noise audible throughout the ship. Pity super-science had never come up with a competent sound-absorber, Rhys-Barley thought morosely. The deck under him swayed a little.

Deeping handed him a slip from Kyla records. There had been four ships of the Windsor Class. Three had gone to the scrap yards over three thousand years ago. The fourth had been abandoned for lack of fuel during the great Boux wars that had resulted in the collapse of the First Empire. Its name: *Regalia*.

"That must be our pigeon. Let's get down to Interrogation Bay, Captain," Rhys-Barley suggested. Together the pair adjusted their arm-synchs and stepped into the teleport.

They reappeared instantly beside their captive. Aliens Officer was already there, enjoying a brief spell of glory, supervising the batteries of every type of recorder, scanner, probe and what-have-you the ship possessed in concealed positions about the *Regalia*. The latter looked like a small whale stranded in a large cave.

The Preacher came first out of the air lock because he always went ahead anywhere. Then followed Calurmo and Aprit, stopping to examine the crystalline formations clinging to the lock doors. After them came Woebee and Little Light. Together they gazed at the severe functionalism and grey metal that surrounded them.

"This is not a pretty planet," the Preacher observed.

"It is not the one Little Light chose," Woebee explained.

"Don't be silly, the pair of you," Calurmo said, a little sternly.

"This is not a planet. It is *made*. Use your senses."

"Let's speak to those beings over there," said Little Light, pointing. "The ones behind the invisibility screen."

He wandered over to Rhys-Barley and tapped his rediffusion shield.

"I can see you," he said. "Can you see me?"

"Alright, cut rediffusion," snarled Rhys-Barley. The crimson on his face was not produced by the force of gravity.

"No evidence of any energy or explosive weapons, sir," Aliens Officer reported. "Permission to interview?"

"O.K."

Aliens Officer wore a black uniform. His hair was white, his face was grey. He had a square jaw. The Preacher liked the look of him and approached.

"Are you the captain of this ship?" asked the Aliens Officer.

"That question does not mean anything to me, I'm sorry," said the Preacher.

"Who commands this ship, the *Regalia*?"

"I don't understand that one either. What do you think he means, Calurmo?"

Calurmo was scanning the immense room in which they stood. His attention flicked momentarily to the little brain glands in the ceiling that computed the lung power present and co-ordinated the air supply accordingly. Then he explored all the minute currents and pulses that plied ceaselessly in the walls and floor, adjusting temperature and gravity, guarding against strain and metal fatigue; he swept the air itself, chemically pure and microbe-proof, rendered non-conductive. Nowhere did he find life, and for a moment he recalled the lands they had left, with the fish spawning in its rivers and the walrus sporting in its seas.

He dismissed the vision and tried to answer the Preacher's question.

"If he means who made the ship go, we all did," he said.

"Little Light did the direction, Woebee and I did the fuel—"

"I don't like it in here, Calurmo," Aprit interrupted, "These beings smell of something odd . . ."

"It's fear," said Calurmo, happy to be interrupted by a friend.

"Intellectual and physical fear. I'll tell you about it later. They've got some sort of inertia barrier up and their emotions don't come through, but their thoughts are clear enough."

"Too clear!" said Woebee with a laugh. "They are afraid of anyone who does not look like themselves, and if anyone *does* look like them—they are suspicious! I say let's get back to the snows: that was a more interesting place to explore."

He made a move towards the ship. Instantly an arrangement of duralum bars and R-rays descended from the roof and held them in five separate cells. They stood temporarily disconcerted in glowing cages.

The Aliens Officer walked among them grimly. "Now you're going to answer questions," he said. "I'm sorry we are forced to use these methods to secure your attention. The speech-pattern separators that allow us to talk together work through the floor here and are relayed out to me via Main Base. I don't imagine you can do us much harm over such a system. And nothing can get through the electronic barricade we've brought up against you. In other words, you're trapped. Now let's have straight answers please."

"Here's a straight answer for your speech-pattern separator," said Aprit. Just for a second he wore a look of concentration. At once smoke rose from the floor of the bay. A dozen different alerts clicked and whirled, relentlessly bearing witness to ruined equipment.

Base signalled a two-day repair job required on language circuits. "Now we'll use our system of communicating," Aprit said, mollified.

"You shouldn't be destructive," the Preacher reproved. "Havoc becomes a habit." Delighted with the chime of his maxim, he repeated it to himself.

Aliens Officer went a little paler. He recognised a show of force when he saw one. Also, he was still hearing them perfectly despite the still-smoking failure. A subordinate hurried up and conferred for a moment. Then the officer looked up and said to the prisoners, "At that act of destruction you released typical Boux configurations of thought. Do you admit to your origins?"

Pointing to the R-rays, Little Light said, "I am beginning to become uneasy, friends. This gadget surrounding us is as impervious as he claims."

"I think it would be very wise to withdraw," the Preacher agreed. "Shall we not have left the Arctic?"

"That seems the only way," agreed Calurmo doubtfully. Retardation always upset his stomach.

Grand-Admiral Rhys-Barley pushed roughly forward. He was dissatisfied with the conduct of the interrogation. Also, he was worried. There was standard procedure for dealing with Boux; man's deadly enemy, originating on fast-rotating planets with high-velocity winds, were fluid in form and could easily assume the shape of men. A Boux-man loose on a planet like Kyla I could do an infinite amount of damage—and Boux-men were not easy to detect. Therefore once Main Base was satisfied there were Boux aboard *Pointer*, they were quite likely to signal the flagship to proceed into the nearest sun. Rhys-Barley had other ideas about his future.

He halted pugnaciously before Aprit.

"What's your real shape?" he demanded.

Aprit was puzzled. "You mean my metaphysical shape?" he asked.

"No, I do not. I mean that my instruments register close to the Boux end of the brain impulse-scale. And Boux can masquerade as anything they like over limited periods of time. What I'm asking is, who or what are you?"

"We are brothers," said Aprit mildly, "As you are our brother. Only you are a very bad-tempered brother."

The stun was shot into Aprit's enclosure from the still-smoking floor. It struck with frightening suddenness. Pressure built instantaneously to a peak that would have spread a man uniformly over the walls of the enclosure in a pink paste. It would have forced a genuine Boux into one of his primary shapes. Aprit merely dropped unconscious.

Little Light pointed crossly at the Grand-Admiral. "For that, directly Aprit returns we shall not have left Arctic at all," he said.

"It was a stupid and ignorant act," said the Preacher.

Nobody had noticed Deeping. When the Captain and the Admiral had come through the teleport, he had been left to take the long, physical route down to Interrogation Bay. One does not waste six million volts on subordinates.

Now he walked straight up to Calurmo and said, peering anxiously through the vibrating wall that separated them, "I am very sorry we have not made you more welcome here, but we are at war."

"Please don't apologise," said Calurmo. "It must be very upsetting for you to have a difference with someone. How long has this been happening?"

"Thousands of years," said Deeping bitterly.

"March that man to the disintegrators," Rhys-Barley bellowed. Two guards moved smartly towards Deeping.

"If you will pardon my venturing to suggest it," Aliens Officer said, wobbling at the knees as he spoke, "But just possibly, sir, this new approach might . . . might be effective."

Faint with his own temerity, he saw Rhys-Barley's hand flicker and stay the guards.

"—a difference we can never settle until we vanquish the enemy," Deeping was saying. He was still pale, but stood stiff and resolute, almost as if he drew strength from these strange beings.

"Oh yes, you can settle it," Calurmo said. "But you've been going the wrong way about it."

"Don't talk nonsense," Rhys-Barley chimed in. "You don't know the problem—unless you are a race of Boux we have not met before."

"My friends are learning of the problem now," murmured Calurmo, glancing at Little Light and Woebee, who were unusually quiet. But the Grand-Admiral went ruthlessly on.

"The enemy have inestimable advantages over Man. It has only been by exerting his military might up to the hilt, by standing continually on his toes, by having one finger perpetually on the trigger, that Man has kept the Boux out of his systems."

"That really is the truth," said Deeping earnestly. "If you have a super-weapon you could let us know about we would be very grateful."

"Don't humour me, please," Calurmo said. He turned to Little Light and Woebee, who smiled and nodded. At the same time Aprit opened his eyes and stood up.

"I had a funny dream," he said. "Do we go home now?"

"We want to readjust these people first," the Preacher said. The five of them conferred together for a minute, while Rhys-Barley walked rapidly up and down and Deeping sneezed once or twice; R-rays had that effect on his nose.

Finally Woebee motioned to Deeping and said, "You must forgive me if I say your people appear full of contradictions to us, but it is so. One contradiction, however, we could not understand. You pen us in here with impenetrable R-rays, as you term your inertia field, and also with duralum bars. The bars are quite superfluous unless they are not what they seem. And of course they are not what they seem; they are another of the machines you so delight in. They are, in fact, categorising grids that transmit almost comprehensive records of the five of us back to your nearest planet. An excellent device! Entire blueprints of us, psycho-

logically and physiobiologically are fed back to your biggest brain units. You really need complimenting on the efficiency of this machine. It is so good, in fact, that Little Light and I have explored Main Base by it, have sent the rest of your fleet packing, and have broadcast directions to your vice-captain or whatever you call him up in the controls; as a result of which, you are now travelling where we want you to go and this Interrogation Bay is cut off from the rest of the ship.

He had not finished speaking before Rhys-Barley had flung himself behind a shield and given the Emergency Destruction order. Nothing happened. Buttons, switches, valves, all were dead.

"You merely waste your time," Little Light said, pointing at the Grand-Admiral and stepping through the dying R-rays. "The power has gone. Did I not explain that clearly enough?"

"Where are you taking us?" Deeping whispered.

"You are taking *us*," Woebee corrected.

"Not—not to Earth?"

Woebee smiled. "I feel that the word "Earth" has some emotional value for you."

"Gosh, yes of course. Don't you see, it's the only planet we ever lost to the Boux, right at the beginning of our troubles with them. But Man came from there, Earth is Man's birth planet, and when it fell—that was the end of the first Empire. Since then we've grown stronger—but all that old peripheral region of space is dead ground to us now."

Woebee nodded carelessly. "We learned that from our investigation of Main Base. The area is now abandoned by the Boux too."

"How awful to think of it stagnating all this time!" Deeping said."

"Really, you are as foolish as the rest," said the Preacher reprovingly. "The stagnation has been *here*. Why, you're still clinging to machinery to support you."

He led his four friends back towards the *Regalia*. "We'll do the rest of the journey on our own," he told them. "These soldiers will want to go back to their duties. It's really none of our concern to hinder them."

In the lock they paused. The personnel trapped in the Interrogation Bay looked bemused and helpless. Rhys-Barley sat on a step staring at the wall. The Captain bit his nails in an absorbed fashion.

Aliens Officer came forward and said, "You have so much you could have taught us."

"There's one piece of knowledge, unlike most of our kind of knowledge, that might be useful to you," Aprit said casually. "In Man's hurry to leave Earth because one or two Boux had arrived, some few men and women were left behind. They had no defence against the Boux, so the Boux had no need to attack them. In other words, there was an opportunity for—intermarriage."

"Intermarriage!" echoed Aliens Officer.

"Yes," the Preacher said solemnly. "Neither you nor your machines seemed able to diagnose that. So you see our origins are a mixture of Man's and Boux's . . ."

"That is a priceless piece of knowledge," Deeping reflected.

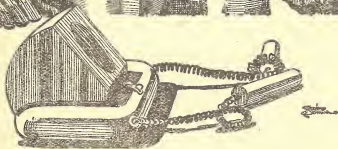
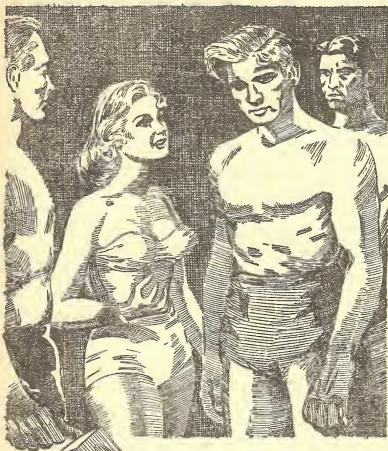
Calurmo smiled a valedictory smile that included even the deflated Admiral.

"I'm delighted if it proves so," he said. "But it is only a just return for Man's priceless gift to the Boux who were our distant ancestors: the gift of rigid form. Fluidity has proved a curse to the Boux. Intermarriage has recommendations for both sides."

This time he remembered to close the air lock doors. The *Regalia* slid, apparently of its own volition, into the great lock of the *Pointer* and out into space. By the time it was heading home, the flagship's captain was busy roaring at his bridge officers and Grand-Admiral Rhys-Barley was speaking apologetically to Base.

Deeping was staring at something that had materialised in his hand: wood sorrel, *Oxalis acetosella*. A flower from Earth.

Brian W. Aldiss



More and more inexplicable yet minor events are happening on board the Ship bound for Pollux with its five thousand inhabitants as Jay West, psych policeman becomes involved in the ramifications of plot and counter-plot. Whichever way he turns he is apparently trapped by circumstances beyond his control.

STAR SHIP

By E. C. TUBB

Illustrated by QUINN

Conclusion

FOREWORD

Fired by the discovery of planets circling Pollux, a star only thirty-two light years away from Earth, the Builders had planned and launched a mighty spaceship capable of bridging the vast interstellar gap between the two systems. There being no way in which to overcome the Einsteinian equations setting the speed of light as maximum velocity they had aimed the ship at Pollux at one tenth the speed of light, stocking it with five thousand people and everything necessary for their survival; even though the voyage would take well over three hundred years it was assumed that the descendants of the original volunteers would survive and finally colonise the distant objective.

In three hundred years the aim and purpose of the journey had become vague and unreal, the ship had become known as the Ship, and by a balanced ecology births and deaths were predetermined by Psycho, an electronic machine which determined the fitness of personnel to either have children—or die. It was the business of dying which concerned Jay West, a fourteenth generation descendant, whose job, as one of the secret Psych Police, called for legitimate elimination of unfit personnel—those who for one reason or another were no longer of essential use to the Ship. But only the Psych Police and the officers of the Ship knew that no-one lived to a natural old age.

As a vent for passions and hereditary unrest, which was gradually being bred out of the inhabitants by selected breeding, legalised duelling had long been in force on board. Those not killed by this method were 'eliminated' by one or another of Jay's colleagues. But these incidents are becoming prevalent—the more intelligent are beginning to realise that nobody lives to be more than forty years old.

Jay, officially a ventilation engineer, is half in love with Susan Curtway, a Maternity nurse in Merrill's official sector, but cannot marry her as the police are exempt from ordinary laws. He knows that Merrill is also interested in Susan and there is friction between them, especially when Chief Gregson warns Merrill that Jay will eliminate him if he bungles another killing. Merrill, who aspires to Gregson's position, decides to do something about it before it is too late. He secretly employs Sam Aldway, a disgruntled Hydroponics worker, to kill Jay in a duel, promising him a position with the Psych police if he is successful.

Meanwhile, Quentin the Ship's Captain, and the only old man on board, holds a council of Executive officers to plan the elimination of the Barbs, a small group of people who have escaped into No-Weight, the unused section running through the axis of the Ship. Although previously unorganised they are now making raids for food and becoming a nuisance, but no solution is offered to dispose of them, No-Weight being a vast unlit space too large to be adequately investigated. At the meeting the Captain informs Gregson that George Curtway (Susan's father) has requested an interview with reference to Psycho. Private interviews with the Captain being forbidden, Gregson agrees to handle it.

Jay meets Susan during an off-duty period and despite her warm affection indicates that there can be nothing between them and that she had better prepare for her marriage period with some eligible male. They part on a bitter note and Jay returns to headquarters to pick up his latest elimination order. It is for George Curtway!

While planning the best way to eliminate Curtway Jay is involved in a duel with Aldway from which he finally emerges victorious without killing his opponent. He then lures Curtway into the region of No-Weight intending to electrocute him but his personal feelings for Susan's father prevail and he hides him inside No-Weight itself. Returning to Curtway's apartment obsessed with the necessity of substituting an unrecognisable body for the man hiding in No-Weight, he is attacked by Aldway and finally kills him. He now has the necessary body and manages to burn the man's face on a power line so that it cannot be questioned.

Reporting his mission accomplished he is suddenly accused by Susan of murdering her father—to admit the charge means death under the Ship's Code; to tell the truth means elimination for inefficiency.

XIII.

For a long moment no one moved or spoke after the accusation then, as Susan let her arm fall to her side and bowed her head, Gregson stepped behind his desk and sat down.

"Let us have some self-control here," he said coldly. "Merrill—if the girl can't stop crying take her out until she does. This office is not the place for tears."

The very harshness of his voice produced the desired result. Susan dabbed at her eyes, lifted her head, and allowed Merrill to seat her in a chair. Gregson gestured for Jay to seat himself and looked at Merrill.

"Report."

"I was notified of a power-drop by electronics and went to the cubicle at fault. On arrival I was accosted by this young woman who accused a certain ventilation engineer named Jay West of the murder of her father. On investigation I found the body of a man, wearing the identity disc of George Curtway and the blue shorts of an Electronic engineer within the cubicle. The man had died from electrocution."

"I see." Gregson stared at Susan. "You realise, of course, the seriousness of this accusation. Murder, together with mutiny and waste, is a crime punishable by death. In the case of wanton, pre-meditated murder together with mutiny, the death penalty also carries the punishment of torture." He paused. "I mention this so that you may be aware of the gravity of the charge."

"I hope they make him scream for years," said Susan viciously. "He killed my father." She did not look at Jay. Gregson sighed.

"You actually saw the crime committed?"

"Of course not," she snapped. "Would I have stood by and watched my father being murdered?"

"Then what makes you so certain that this man is the guilty party?" Gregson glanced at Merrill. "How old was the deceased?"

"Fourteenth generation," said Merrill easily. "He was an expert Electronic engineer."

"I asked you his age, not his capabilities." Gregson softened his voice as he spoke to the girl. "You see? Your father was an old man, my dear, and old men aren't always predictable. There is no proof that anyone killed him at all."

"He's dead, isn't he?"

"Of course, but the death could have been accidental."

"No."

"You can't be sure of that," insisted Gregson gently. "We of the psych-police, perhaps better than anyone else, know how soon a man can lose his mental stability when he nears his fortieth year. Perhaps

your father felt his coming decline and, though I hesitate to suggest it, he may have decided to terminate his own life."

"Ridiculous." Susan shifted angrily in her chair and glared her contempt at the suggestion. "My father would never have committed suicide."

"How can you be certain of that?" Gregson stared down at the surface of his desk then looked directly at the girl. "The very method of death is . . . suggestive, don't you think? Who better than an expert in electronics would know just where the heavy-current cables were to be found? Such a man would know how quick and painless death from electrocution would be. It seems logical to assume that your father may have chosen that way to end his life."

"My father was sane," stated Susan flatly. "He was as efficient and as capable as he had ever been. He was old, true, but not that old. He was murdered."

Looking at her Jay had to admire her spirit. She knew nothing of the policy of the psych-police, naturally, and to her Gregson must seem a tedious old man trying to avoid the issue so that he could save himself work. Skillful handling by Merrill could have saved this situation but, glancing at the officer, Jay knew that, even if Susan hadn't made the accusation, she would have been encouraged into it. For some reason Merrill hated Jay, and now he saw his way to get rid of an enemy.

And he had an excellent chance of doing just that.

If Jay admitted killing Curtway then he was slated for punishment beneath the Ship's Code. Gregson couldn't cover him up now, not when the accusation had been made public, and even if he could Jay had a shrewd idea that Merrill wouldn't let him. If Jay told the truth, that he hadn't killed Susan's father, then he was in equal danger of elimination from Gregson for having failed his duty. Either way he was in danger of his life and, if George had spoken the truth, Gregson would be merciless. Jay leaned forward as Gregson spoke again.

"You have made an accusation," he said to Susan. "Your evidence?"

"I met this man," again she made a point of not looking at Jay, "immediately prior to finding the body of my father. There was no reason for him to be in that quarter."

"Unwarranted assumption," snapped Gregson. "That is not proof."

"I have reason to believe," she continued stiffly, "that my father had cause to speak to this man on certain private matters. My father was no duelist and would refuse to fight anyone no matter what the provocation. I suggest that this man was goaded into killing my father because he couldn't murder him in the arena."

"That isn't true," blurted Jay. "I've never fought in the stadium either. I . . ." He swallowed as he remembered the tell-tale red dot on the inside of his left forearm. As yet he had had no chance to have it removed and he was acutely conscious of both Merrill and the girl looking at it. "I did not dislike your father," he muttered, "and I didn't want to fight with him."

"That's not true," flared Susan. "My brother will testify that, on approaching my father's cubicle, he heard raised voices and this man demanding that my father should meet him in the arena for some fancied insult. Fred, my brother, didn't wish to violate privacy and walked away." She bit down on her soft, lower lip. "That was the last time either of us heard my father alive."

"Still hardly proof of murder," snapped Gregson. "Is that all?"

"Seems pretty conclusive to me," said Merrill. "If the brother can swear that West was in the cubicle with Curtway and this girl saw him outside within seconds of finding the body . . ." He shrugged.

"I did not ask for your opinion," said Gregson coldly. He looked at Susan. "Have you any other testimony?"

"When I met him," Susan gestured towards Jay. "I noticed something odd about him. We'd quarrelled, never mind about what, and yet he seemed too friendly and wanted to take me away from the area."

"Perhaps he was sorry for the quarrel and wanted to restore himself in your good graces?"

"No. It wasn't that." She frowned as if trying to stir her memory. "There was something else. There was an odour, a horrible burnt kind of smell around him. I don't know how to describe it." Her face twisted in sudden emotion. "I smelt the same kind of odour when . . ."

"The body was burned beyond all recognition," explained Merrill to Gregson. "The charred odour was still very distinctive when I arrived."

"I see." Gregson rested his head on the tips of his fingers, his elbows supported on the desk, and stared down at his papers for a moment as if lost in involved thought. Then he looked at the others, his face flush and bleak, his eyes narrowed as he stared from face to face.

"You have heard the accusation and testimony," he said to Jay. "Can you refute them?"

"There is nothing for me to refute," said Jay easily. "Surmise, assumption, and sheer coincidence." He stared appealingly at Susan. "I did not kill this young lady's father. He was my friend, I knew the entire family, and I swear to her on my hope of life that I did not do as she accuses."

"Do you believe him?" Gregson stared at Susan.

"No."

"You have no real proof," insisted Gregson. "Personally I could hardly bring myself to sentence this man without much firmer evidence. I . . ."

His voice droned on but Jay was hardly listening. He was waiting for the obvious suggestion and, as Gregson spoke, he wondered why it hadn't already been made. There was one certain way to test the guilt or innocence of any statement. The lie detectors were part of Psycho, fool-proof, almost omnipotent in their efficiency. Susan, as yet, hadn't demanded their use. Perhaps she hadn't thought of it, perhaps she was saving the demand until later, perhaps she, even now, didn't really believe that he was guilty of the crime however much outraged feminine pride and hurt emotions had made her accuse him. Gregson, of course, wouldn't mention them. As far as he was concerned Jay had killed the man and any evidence only went to strengthen that belief. The job had been almost criminal in its careless inefficiency, but these things had happened before and, to an extent, were tolerated for one time at least.

Merrill proved to be the Judas.

Susan was wavering, Jay could see that, could see too that Gregson would smooth her down, send her on her way and later, report the finding of the 'murderer' and his subsequent 'death.' A nice, normal, easy way out of an unpleasant difficulty.

". . . so you see, my dear," soothed Gregson, "you must leave it to us. The Psych-police aren't as stupid as some people seem to think. There are certain tests and, even if we have to check every man and woman in the sector, we shall be able to either prove that your father was murdered or that his death was an unfortunate accident."

"Tests?" Susan frowned. "How do you mean?"

"The odour you mentioned," explained Gregson easily. "We know that tiny particles which constitute what is known as an 'odour' can be found on the skin and clothing of any who were present and experienced the same 'smell.' There are other things, perspiration index for one and . . ."

"The lie detectors," said Merrill.

"Exactly." Gregson didn't look at the officer but Jay could tell by the slight writhing of muscle along the edge of the jaw just how Gregson felt. "As I was saying . . ."

"This whole thing could be cleared up now," insisted Merrill. "Why don't you just put the accused to the test and have done with

it?" He looked at Susan. "You'd be satisfied then, wouldn't you? If this man answers truthfully whether or not he killed your father then you could go back and tell the others. If innocent you could clear his name. If guilty . . ." Merrill shrugged. "Personally, I'm surprised that he hasn't requested it himself if he's innocent of the charge."

And that was that.

Numbly Jay grasped the twin electrodes and prepared to answer the questions. There was no hope of evasion, any lie would reveal itself in a flash of red across the exposed plate, the truth with a flash of green. In minutes now, seconds even, the truth would come out. He grimly hoped that only part would be revealed, not the whole. He tensed as Gregson leaned forward.

"Did you kill my father?" It was Susan who asked the question. She had risen in her excitement, her eyes anxious as she blurted the question, and Jay could guess that now, after the shock of finding the body had worn off a little, she desperately wanted to find him innocent. Jay looked directly into her eyes as he answered.

"No."

Green, a wash of colour across the blank surface of the detection plate and, with the glowing colour Susan seemed to recover new life.

"I knew it," she whispered. "All the time I really knew that you couldn't have done it, but I wasn't sure. Oh, Jay!" She was in his arms then, the wonderful softness of her hair against his cheek and, for a moment, he relaxed to the nearness of her warmth and beauty. Merrill's voice jerked him back to reality.

"It's fixed! The detectors are fixed!" He stared wildly at Gregson then at Jay. "You . . ."

"Be silent!" Gregson rose from his seat and stepped from behind his desk with a smooth co-ordination of muscular power. "Take the girl back to her sector and return to duty."

"But . . ."

"You heard my orders, Merrill!"

"I heard them," said the officer stubbornly, "but I don't like it."

"The detectors cannot be 'fixed' as you call it," snapped Gregson impatiently. "This man did not kill this girl's father. He is innocent of the accusation." He stared at Susan. "You will, of course, spread this information to all who may be interested. You have accused an innocent man and, while I can understand and sympathise with your emotional upset, yet you owe it both to the psych-police and to Jay West to undo the harm you may have done." He pointed towards the door. "You may leave now. Merrill! Obey your orders."

For a moment the officer hesitated, doubt struggling with his own knowledge then, as he stared at Gregson's taut features, shrugged and led the way from the inner office. Jay was about to follow him when Gregson called him back.

"Not you, West. Stay here."

Jay knew what was coming, had known it from the first. He had not killed the man he should, Gregson knew it, Merrill too if he had stopped to think on the exact phraseology of the question, and now he had to answer for his failure to do his duty. Tiredly he slumped back into the chair.

"You were lucky," said Gregson unexpectedly. "Do you realise that?"

Jay shrugged, not answering.

"If the question had been 'Did you kill a man?' your answer would have automatically convicted you to death by torture. Psycho would have seen to that, or the Captain rather, which is much the same thing." Gregson stared thoughtfully at the young man. "Whom did you kill?"

"Curtway."

"Don't bother to lie to me, West. Merrill may think that the detectors have been fixed but I know that they haven't. You didn't kill George Curtway. You killed someone else and planted his body in the place of your assignment." Gregson nodded. "I'd wondered about your apparent carelessness, sloppy work isn't like you, and that job was ludicrously inefficient on the surface. You had to choose electrocution, of course, nothing else would have disfigured the body beyond recognition." Gregson nodded again as if pleased at solving a problem. "Who was it?"

"Sam Aldway." Jay pointed to the assignment card on the desk. "I'm anticipating. You can cross him off already."

"And Curtway?"

Jay remained silent.

"You've failed in your duty, West," said Gregson coldly, and now there was no trace of his former friendliness in his tone. "You know the penalty for that." He leaned forward and stared at Jay. "Why did you let him live?"

Gregson didn't use the lie detectors, the obvious and simplest method of acquiring tested information and, looking at the chief of psych-police, Jay began to guess why. Tests on the detectors were recorded on tape and transmitted to Psycho. Others could possibly replay that information, the Captain certainly, though there was no indication that he ever did. Gregson was being cautious and, realising that fact, Jay felt the first glimmers of hope.

"I'm in love with his daughter," he admitted. "I just couldn't eliminate her father."

"Is that your only reason?"

"Yes. Sam Aldway, the man I killed, picked a quarrel with me." Jay shrugged. "I saw a chance to make the switch and took it."

"I see." Gregson sighed with something like relief. "You know that Psycho determined Curtway's death and you know that it is our job to eliminate the unfit as ordered by the machine?"

"I do."

"You know too the penalty for inefficiency?"

"Yes."

"You're in trouble, West," said Gregson softly. "If I relay this information to Psycho Merrill will take great pleasure in eliminating you." He paused. "Where is Curtway?"

"I don't know."

"But you could find him?"

"Yes, I think so."

"Find him, West," ordered Gregson. "Find him and eliminate him. When you have done that notify me personally so that I can examine the body. Do that and I'll forget to relay your inefficiency to Psycho." He smiled without humour and, watching him, Jay was reminded more than ever of a feline.

"Find and kill that man, West—or die."

He was still smiling as Jay left the office.

XIV.

The Ship was a murmuring throb of whispering sound. The eternal, inevitable vibration of life trapped in a medium of emptiness and silence. It was comforting in a way to hear it, to feel the subtle quiver of footsteps, the soft drone of engines, the thousand little sounds of five thousand people living and breathing, loving and hoping, playing and working in the titanic metal egg which was their universe and their home. George Curtway had known that sound all his life, had been born to it, lived with it, felt it as a part of him and those around him. Now, lying in the thick, almost tangible darkness of No-Weight, he clung to it as the one familiar thing in a world of terror.

He was afraid.

He was afraid of the darkness, the emptiness, the unseen but living vastness of the space around the central axis. Never before in his life had he been in any space larger than the exercise rooms, always there had been others around him, and even in the privacy of his own cubicle

or the common rec-rooms, he had had the comforting knowledge that others were within a few yards. Now he suffered from the twin fears of darkness and agoraphobia and stared, wide eyed, into the surrounding darkness.

He had not moved far since Jay had left him. He had tried to sleep a little, but had not felt tired. He didn't feel hungry either and had long ago lost all track of time. He could have drifted in darkness for an hour, or a week, or a month. He didn't know.

He started as a slight sound came from the darkness before him, a soft, almost inaudible scraping, a sound as of an indrawn breath, the slight stir of disturbed air. It wasn't the first time he had heard such sounds but he didn't yield to superstitious terrors. Ghosts, goblins, elves, fairies, ghouls and vampires, the whole realm and terminology of the shadow-world of darkness and night, had died for the Ship's personnel when they had left their own world. None of those at present alive had the slightest taint of superstitious fear. If there was a noise in the darkness, then it must have been made by living persons, and George wanted to know who they were.

"Who's there?"

Silence. The smothered sound of a laugh. Again the scraping as of someone kicking against metal and launching himself through space. Cautiously George shifted his position and strained his ears for further betraying sounds.

The clang of metal ruined his concentration and light, streaming through an open hatch 'up' and to one side, caught his attention. A dark shape squeezed through the opening as George kicked himself towards it.

"Jay?"

"Is that you, George?" The young officer drew himself clear of the hatch and, reaching out, swung the door shut after him. "Let's get away from here."

"What's happened?" George allowed himself to be led away from the hatch, gripping tightly to the arm of the officer as they drifted through darkness towards an unknown destination.

"Gregson knows that you're still alive." Rapidly Jay told of the accusation, impromptu trial, and Gregson's ultimatum. "He followed me, of course, but I had expected that. I managed to dodge him long enough to pass through the hatch." Jay swore as metal bruised his face. "Waste! Why can't we have lights in here?"

Light came at that moment, a shaft of brilliance from the newly opened hatch, and a man's head and shoulders were visible as he peered into No-Weight. Jay twisted as he stared towards the illumination and caught a dimly-seen girder to steady himself.

"Gregson ! If he finds us he'll kill us both."

"If he can," said George grimly. He stared at the barely revealed latticework of stanchions and girders. "Even with lights he'll have a hard job to find us in here."

"He knows that." Jay grunted as the hatch slammed shut and darkness returned. "He'll lock the door and seal us in. Let's hope that he'll be satisfied to leave us alone now."

"You think he will?" George didn't sound too hopeful. As the darkness closed around them he had felt a return of his unfamiliar fears and, even though he now had company, he didn't relish the thought of spending an indefinite period in the loneliness of No-Weight.

"No," admitted Jay. "He wants us dead. You because, for some reason, he's afraid of you, and me because I let you live." In the darkness he sought and found the other's arm. "What's all this about, George? Why should Gregson be afraid of you?"

"I told you, Jay. I found out that he has cheated on Psycho and avoided his own death."

"So you told me, but what proof have you? Even if you did manage to get to the Captain and make your accusation, could you make it stick?" Jay wiped at his forehead, half-annoyed with himself to find it moist with perspiration. Now that the swift rush of action was over he felt the emotional collapse of the reaction and with its attendant depression felt pessimistic.

Like it or not he was as good as dead. Trapped in No-Weight he would starve or die of thirst. The exits were all guarded, the emergency hatches locked and, even if Gregson left them alone, neither he nor George had any chance of reaching the Captain. In effect they had chosen to hide in their own tomb.

"Once we get to the Captain," said George, "I can prove what I say." He hesitated. "Do you know anything of electronics, Jay? Or of the working of Psycho?"

"A little, not much."

"Psycho is a kind of electronic sieve. Everyone has a card, it's really a sheet of metallic plastic impressed with varying degrees of magnetism, and those cards are sorted and compared to a master plate in the machine itself. All cards not meeting specifications are ejected. You know what happens to them better than I do, but that isn't important. I only guessed at the real purpose of those cards after I had made my check and found out what had happened."

"And that was?"

"The totals of the cards issued, the cards remaining, and the cards erased should be the same. In other words the Ship left Earth with a certain amount of cards. That total should now be the same. Well, it isn't."

"Perhaps they lost one," said Jay. "Or destroyed one."

"No. Those cards operate on a closed circle. They are ejected, erased, refilled and reused. A record is kept of the exact number at each stage of the operation together with a punched tape signifying disposals." George paused. "I found that there are two cards missing."

"That isn't important," snapped Jay irritably. He felt a sense of let-down in what the older man had said. "I've seen those cards. Perhaps someone lost one in some way. Waste, George! In three hundred years it wouldn't be hard to lose a card or two."

"You miss the point, Jay." George sounded as if he were explaining why two and two should always make four. "The cards you've seen aren't the ones from the machine. When I talk of ejected cards I don't mean the copies you've seen. The cards themselves remain within Psycho. Once scanned and found wanting a copy of name and number is made, the copy ejected, and the original erased and refilled. The copies are useable more than once. In effect no card, as I use the term, ever leaves the machine."

"So? Where does that get us?"

"Someone has tampered with Psycho. Has located two cards, removed them, and possibly destroyed them." George sighed at the other's silence. "Can't you see it yet, Jay? Suppose that your card is in the machine. You know that one day, you don't know just when, that card will be scanned and ejected. When that happens you know that you are due to die. You don't want to die. What do you do?"

"Take out the card," said Jay automatically, then swore. "Is that what happened? Is it possible?"

"Yes, to both questions. It is possible, if you know all about the machine. I might be able to do it—just, but it wouldn't be easy."

"Gregson?"

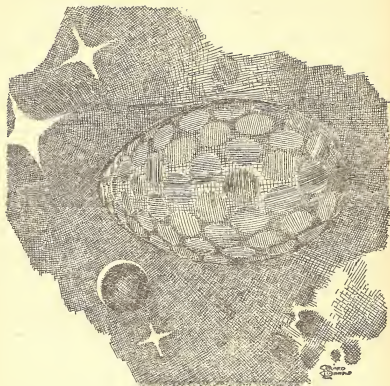
"He would have to be in on it. As chief of psych-police he would be the first to get curious and suspicious."

"But he couldn't remove the cards?"

"No."

"Who then?"

"I don't know," said George slowly. "I've not had time to give this thing much thought. I only stumbled upon the discrepancy in the grand totals a short while ago and you know what's happened since then. I knew that Gregson must be implicated because of his position



but even then I didn't know about the programme of elimination. You taught me about that, though I'd had my suspicions as I told you."

"It doesn't make sense," protested Jay. "Why should Gregson do that? All he needed to do was to wait until his card was ejected and then destroy it. As chief of psych-police no one need have ever known."

"It couldn't have been as simple as that, Jay. Other men have been in Gregson's position, and I assume that they were all eliminated when their turn came." George sucked in his breath. "You know, the more I think about it the more complicated it all becomes. Who eliminates the psych-police? Who decides when the chief is due for death? There must be some check or safeguard, Jay, if there wasn't we'd have had a despotism centuries ago."

"We know our responsibilities," said Jay curtly. He didn't want to explain how each officer carried the knowledge of his fate with him and how, sometimes in the silent darkness of their lonely cubicles, they awoke to sweating fear of the unavoidable. He blinked in a sudden flood of light.

"The lights!" George stared at the rows of glowing tubes. "Someone's turned on the lights!"

"Gregson!" Jay felt a sudden nausea as he looked at the immensity of No-Weight and clutched at a girder for support. He had never, in all his life, seen anything as big before. It was incredible in its sheer vastness, a colossal tube fully a hundred yards across and so long that its sides diminished in perspective. Girders ringed it, a complex latticework of thick metal struts and stanchions, webbed in the centre to a unified whole from which spread the ranked layers of the Ship itself.

"It's big," whispered George and his knuckles as he gripped the stanchion showed white beneath the strain. "It must be the biggest thing in the Ship."

Which, of course, wasn't true. No-Weight, because of the preponderance of girders and essential fabric, the low-gravity at the perimeter and the absence of it at the central axis, was merely the largest unused space in the Ship. Even at that the Builders had found a use for it. Stale air, rising from the lower levels, was piped to No-Weight from where it was blown down to the gardens there to be circulated over the acres of carbon-dioxide removing plants and adjusted for optimum human consumption. But to a man whose horizon had always been the metal wall of cubicles or corridor, No-Weight was big.

Sound echoed through the silence, the clang of metal and the soft shuffle of distant feet. Down the brilliantly lit tube, looking tiny and insignificant against the incredible thickness of the girders, men streamed through an open door. Jay looked at them, narrowing his eyes as he tried to focus on the unaccustomed distance, then turned his head as similar sounds echoed from near at hand.

"What's happening?" whispered George, instinctively keeping his voice low in the echoing vastness. "Who are they? What are they doing here?"

"Gregson," said Jay again, and tasted a bitterness in his mouth as he looked at the new arrivals. They were strangers but he recognised the type. The hangers-on at the Stadiums, the men who found pleasure in watching pain and struggle, the frustrated beings who, denied the very thing for which they had been bred, found escape in personal combat and vicarious battle. Others were among them, familiar shapes

wearing the black shorts of the psych-police and, from the hands of both police and strangers, little flashes of metallic brilliance sparkled and died, flared again and dulled, flashing as the bright lights reflected from the polished surfaces.

"Knives," said George wonderingly. "They're carrying knives."
"They're going to search No-Weight," explained Jay. "They've entered by two doors and will search the sector between. When that's done they'll move along until we'll be trapped against one of the ends." He squinted down the length of the tube. "See? They've started towards the engines and will sweep towards the sealed areas."

"Can we escape?" George looked hopefully at the officer. "What about that hatch by which you entered?"

"Gregson would have locked it after him." Jay shook his head. "We can hide, I suppose. It's going to take them a long time to sweep through the central axis, but they'll get us in the end." He stared at the knives in the hands of the searchers. "Gregson must be desperate to do a thing like this."

He fell silent, crouching behind a girder and watching the skilled manoeuvrings of the searchers. Their plan was simple and, because of that, highly effective. A party moved out to the central girders and, at a signal, moved forward and around. Nothing living, or dead for that matter, could escape being seen by them. A second party waited a little behind the first, resting poised and ready, their knives in their hands and prepared to dart after and attack anyone who eluded the searchers. The two parties moved forward together; the two groups of searchers moving steadily apart while a third group, smaller than the others, strung themselves along the examined area.

"Can we dodge past them?" George ducked behind the girder and looked appealingly at Jay. "They'll hardly search the entire area twice."

"They'll search until we're found and killed," said Jay grimly. He kept his voice low, knowing how sound travelled in the silence of No-Weight, knowing too that it was only because the searchers were concentrating on their immediate vicinity and not worrying about what lay ahead, that they had not been seen when the lights went on. He kept the bulk of the girder between them and the searchers as he spoke to George.

"Gregson's thought of everything." He jerked his head towards the armed men. "They are even wearing white arm bands. That's to stop us mingling with them and pretending that we belong to the party. They would hardly know us by sight and, as far as Gregson knows, we could have knives of our own."

"What can we do? Have you any ideas, Jay?"

"Not yet." Jay glared at the lights. "If it wasn't for those we could sneak past and maybe break out into the Ship. We could even attack a couple of searchers and take their arm bands and knives." He glanced at the electronics engineer. "Can't you kill the lights in some way?"

"Not from in here, Jay. The wires and fuses are all in the outer corridors, and even if we managed to smash the protective cover and short a tube, it wouldn't extinguish the others." He stepped towards one of the lights. "You want me to do that?"

"No. If you killed one it would only attract attention." Jay peered around the edge of the girder and jerked back his head as he saw how near the searchers were. "Come on, George," he whispered. "We've got to get moving. Follow me, stay close to the wall, and always keep a girder between you and the advance party. Ready?"

Gravity was so low that they could literally skim over the 'floor.' Jay led the way, thrusting himself along with calculated force, judging things so that he could cushion his impact with his hands and arms. George followed him, almost as expert as the younger man, but bruising himself once or twice as he forgot the fact that, although he had little 'weight' he still had normal mass. Rapidly they passed along the central axis towards the sealed areas, not stopping until the searchers were far behind. Then they paused for breath and to relax tensed muscles.

"Can we escape, Jay?"

"I don't think so." Jay stared around at the silent girders. "This part of the Ship is strange to me but Gregson must know the locale well enough to know that we can't get out."

"I see." George sat thinking for a moment, then looked at the younger man. "Look. I got you into this, Jay, and maybe I can get you out. Suppose that you took me prisoner and delivered me to Gregson? That would save your life, wouldn't it? And later, after it was all over, you could tell the Captain what I told you about the tampering with Psycho."

"No."

"Be reasonable, Jay. What's the good of both of us getting killed if one can escape? I don't think that I'd mind dying so much if I knew that Gregson would be taken care of afterwards. I'm an old man, Jay, and I don't suppose that I could live much longer, but you're young." He hesitated. "There's another thing. I'd like to feel that there was someone to look after Susan. You know what I mean."

"Look, George," said Jay patiently, "it wouldn't work. Gregson can't afford to let me live now and, once he reports my inefficiency to

Psycho, I'd be due for elimination. He may already have done so. In any case those searchers probably have orders to kill everything living they find. We'd never get past the first group, let alone down into the Ship itself." He shook his head, then tensed as he heard a sound. "What was that?"

"I don't know," whispered George. "It sounded like a giggle or . . ." He broke off as the sound was repeated. "Could they have reached us already?"

"I doubt it." Jay listened again then stared towards a girder. "Stay here."

He moved, careful to avoid the slightest possibility of noise, and drifted lightly towards the girder from behind which the sound had come. He reached it, peered around it—and stared at one of the most grotesque creatures he had ever seen.

XV.

A man cowered behind the girder, naked, his pallid skin grimed with dirt so that it looked almost grey in the brilliant lighting. He tittered as he saw Jay, his deep-lined face convulsed with horrible merriment and his eyes peered through a tangled mat of waist-length hair. It was the hair which made Jay doubt whether the creature was really human. He stared at it, hardly believing his eyes, looking from the hair to the bloated limbs, the filthy skin, the scabrous, unhealthy-looking flesh.

"What is it?" George gripped Jay's arm as he stared at the monstrosity. "Is it a man?"

"Yes."

"But look at it! That hair!"

"It's white," said Jay slowly. "White hair! Is it possible for a man to have white hair?"

He had never seen white hair. All the Ship personnel had brown or black with a little red and some blonde. White hair was a sign of age and no ordinary member of the Ship personnel had ever seen an old man. He recoiled a little as the stranger lunged to his feet.

"Food," he mouthed. "Food!"

"He's insane," stated Jay decisively. "No sane man would let himself get into such a state of filth." He stepped back as the man advanced towards them, his hands held before him, a thin trickle of saliva running from the corner of his mouth. "Food," he whined. "Don't forget poor old Joe. Joe's hungry. They didn't leave him anything to eat."

"Who didn't?" Jay forced himself to grip the man by the shoulder. "Which others?"

"The rest." The stranger gestured vaguely around him. "We lived here, all alone in the dark." He tittered again. "I like the dark. I like to float in the emptiness and drift from place to place." His face crinkled as if he were going to cry. "But I'm hungry. I'm always hungry. And now they've left me all alone. Poor old Joe, no one wants him now. No one at all."

Looking at him Jay could believe that. The man could arouse nothing but abhorrence in any who saw him. He gritted his teeth as he shook the obese figure.

"Who are you? How did you get here?"

"I'm Joe," whined the creature. "They wanted to kill me so I ran away." He giggled. "I fooled them. They couldn't kill old Joe. Joe was too clever for them, Joe was." He giggled again and held out his hands. "Food?"

"That must have been what I heard while I was waiting for you," said George. He told Jay of the sounds which had troubled him while resting in the darkness. "Is it possible that others have run away to hide in No-Weight?"

"I don't know," said Jay slowly. He frowned, remembering vague rumours of people who had escaped their fate by flight to what he had always thought was a living tomb. It was one of those rumours to which no one paid much attention. Like the one about if you drilled through the hull at the lowest level you'd only find emptiness. Logical, he supposed, but so unreal as to be almost beyond imagining. The sounds of the advancing searchers warned him that they had little time and he forced himself to grip the stranger.

"How long have you lived here?"

"A long time," tittered the man. He seemed pleased to have an audience. "A long, long time. Others came after me but I've lived the longest."

"Which others?" said George. "Where are they?"

"They ran away when the lights came on," complained the man. "I don't like the lights, they hurt my eyes, but they didn't care about that. They just left me, all of them, and they didn't leave me any food." He held out his hands again in an oddly disturbing gesture. "Food? You'll feed poor old Joe?"

"Later." Jay stared at George. "There must have been others hiding in No-Weight besides this wreck. Somehow they obtained food and managed to live." He nodded thoughtfully as he thought about it. "Food requirements would be low in absence of gravity and lack of physical exercise would account for his fat. Lack of water

would account for his dirt though he could probably lick enough condensation from the metal to stay alive."

"What about his hair?" asked George. He shuddered as he looked at the tangled mass. "Look at it! Like a lot of crawling rootlets. It's disgusting!"

"Never mind his hair," Jay stared at the man again, trying to ignore his odour, his dirt, the saliva drooling from his mouth and the restless twitchings of his eyes. "Joe!"

"You want me? You want old Joe?"

"Those others you spoke of, where are they?"

"They ran away." A cunning expression crept over the lined face. "You want to find them?"

"Yes."

"They've got food. You'll fetch it back to poor old Joe?"

"Yes." Jay glanced down the tube towards the approaching searchers. "If you'll tell me where to find them I'll get some food for you. Where are they?"

"Down there." The man gestured towards the sealed areas. "They ran away when the lights came on. Bosco, and Murry, and the rest. They all ran away from me." Tears of self-pity glistened in the restless eyes. "Food?"

"Where did they go?"

"I told you." Again the man gestured towards the end of the central axis. "Somewhere down there. They know where the food is but they wouldn't tell me." He sniffed, wiping his nose on the back of his hand, a gesture which almost caused Jay to vomit. George pulled at his arm, his face anxious.

"Hurry, Jay," he whispered. "We'll be seen soon."

"Coming." Jay stared hopelessly at the lined features of the stranger knowing that he had obtained all the information he could from the creature, and yet knowing that it wasn't enough. For a moment he hesitated then, as the first of the searchers came into view, followed George towards the end of the tube.

They had passed two sets of girders when they heard the shout and, for a second, Jay thought that they had been seen. Then the shouts turned into laughter which faded against a background of screams. Jay stared grimly at the electronics engineer.

"Still want to give yourself up?"

"They killed him," said George sickly. "An old man like that and they killed him."

Jay didn't answer but progressed with increased speed towards the blank metal ahead. A rivetted bulkhead sealed off No-Weight from

the mysterious regions of the sealed areas beyond and Jay stared at it, biting his lips as he looked for signs of the 'others' which the insane creature had mentioned. George gripped his arm.

"Look! A door! See?"

A small hatchway was open at the edge of the bulkhead. A round panel, three feet across and opened inwards so that the opening looked like a dark spot against the polished smoothness of the bulkhead. From where they stood it was 'up' and a little to the right, almost directly opposite across a hundred yards of clear space. Even as they looked at it the panel began to close.

Jay gripped a strut, twisted himself so that his feet rested against the metal and, aiming quickly, thrust himself with the full power of his muscles towards the closing door. It was a risky thing he did. His speed was too great for safety and, as he hurtled across the clear space, he knew that he would land too heavily. He twisted his body as he passed the central region where 'gravity' abruptly altered so that, instead of the hatchway being 'up' it now became 'down,' and plummeted feet-first towards the panel.

He hit with a force which jarred the teeth in his head and sent little shafts of pain lancing up his legs and thighs. For a moment he was afraid that the door had been locked and that he had broken his bones against the unyielding surface. Then the panel gave beneath him, he hurtled through the hatchway, and was in darkness struggling with something soft and yielding. A man swore, another whimpered, then hands closed around his throat as a voice rasped terse instructions.

"Shut that door! Quick!"

"Here's another." A man, a shapeless figure against the light, grunted as George gripped the edge of the hatchway.

"Get him inside," snapped the first voice. "Quick!"

Light flared with the closing of the hatch and, in the dim glow of a hand-beam, Jay blinked up at the first speaker. He was a big man, stocky, with hair mottled with grey and a face which was full of character. He stared at Jay, saw the black uniform shorts, and his hands tightened with grim promise.

"Police!"

"No." Jay tore at the hands around his throat, gripping the little fingers and wrenching them free. "Bosco? Murry?"

"How did you know my name?" The big man rubbed his injured hands and glared at Jay. "I'm Bosco."

"Joe told me." Jay looked towards where George was held by the other man. "We're on the run from Gregson, the chief of psych-police. Those searchers are after us. They killed the old man—Joe he said his name was—and they'll kill us too if they find us."

"Why?"

"I escaped into No-Weight," said George quickly. "Jay here helped me."

"You came to join the Barbs?" Bosco glared suspiciously at Jay. "You? An officer?"

"I had no choice," explained Jay grimly. "I should have killed George, eliminated him, but I didn't. Gregson found out and now he wants us both dead." Jay stared curiously at Bosco. "Are you Barbs?"

"Yes. We're the barbarians, so called because we wanted to live." There was a brittle dryness in the big man's voice. "We sulk in No-Weight, eating when we can, drinking what we can, living how we can. You should know of us."

"I've heard rumours," admitted Jay, "but that's all. I'd begun to doubt if you really existed."

"A policy of silence." Bosco nodded. "It makes sense, Murry, the less who know of us the fewer there will be wanting to join us." He looked at Jay again. "What shall we do with these two?"

"Throw them back into No-Weight." The man who held George glowered at his captive. "If it hadn't been for these two the police might never have wanted to search. We only just got away in time as it is."

"We can't throw them back," snapped Bosco. "If we leave them alive, they'll talk, and if we kill them first someone will begin asking questions. Waste!" He glared at Jay. "Why did you have to follow us?"

"I wanted to live," said Jay quietly. He looked at the grey-haired man. "Like you. Like Murry here. Like Joe."

"Joe was too far gone to save." Bosco didn't seem to like talking about it. "The searchers expect to find some Barbs living in No-Weight, and we had to leave some for them to find. Joe, Mary, Sam, a few others. All of them old-timers. Joe had lived here for over thirty years and was insane for the past ten. The darkness finally got him, that and other things." He didn't explain what those 'other things' might have been. "It's best that they should die to save the rest. They were due for the converters years ago." He looked at Murry again. "Well?"

Murry shrugged. He had made his suggestion and didn't seem able or willing to make others. George spoke before the big man could make up his mind.

"Can't we wait here until the search is over? We'll promise not to tell anyone about what we've seen."

"How can we trust him?" Murry jerked his thumb towards Jay. "A policeman. Waste! He'd have the Ship aroused as soon as he got to a phone."

"The Ship will be aroused anyway," said Jay easily. "You forget, Gregson is looking for us, not you. When he doesn't find us he's going to start wondering. As far as anyone knows at the moment there is no way out of No-Weight except the guarded entries. As soon as his men report that we aren't in here Gregson will order an investigation. He may even go to the Captain."

"The Captain?" Bosco glanced at Murry, an odd expression in his eyes. "Why should he do that?"

"Because he knows that's where we are trying to get," Jay smiled at the big man. "George here has something to tell him, something Gregson will do anything to prevent the Captain from hearing. If he misses us now, and he will, then he'll become desperate. On the other hand if you take us to the Captain, or help us get to him, then, maybe I can put in a good word for you."

"What could you do for us?" Murry released George and stepped forward, his face coming into greater clarification as he neared the source of light. Like Bosco his hair was shot with grey and his features wore an unusual hardness. Jay shrugged.

"I don't know yet. An amnesty, perhaps? Something like that. But it all depends on the Captain."

"Yes." Murry seemed to be secretly amused. "It does, doesn't it." He glanced at Bosco. "Think we should do it?"

"Why not? We can't throw them back into No-Weight and I don't fancy killing them here. They could be telling the truth, or they might be lying to save their own skins. It doesn't matter. If they're trying to be clever we can eliminate them later." He jerked his head towards Jay and George. "Come on with us, then. Stay close behind and don't try anything." He was turning away when Jay caught at his arm.

"Where are you taking us?"

"To join the rest of us who escaped that trap." Bosco led the way from the cubicle into a wide corridor.

It was bitterly cold, so cold that Jay felt his skin goose-pimple and his teeth chatter. Next to him George moaned with discomfort and rubbed his arms to try and keep them warm. The two Barbs, aside from their pluming breath, didn't appear to react to the chill and Jay guessed that, to them, it was no new experience.

A light winked ahead of them, Bosco answering the signal and, within seconds, they had come up with the rest of the party. Jay

stared interestedly at them. Not more than a dozen, eight men and four women, all had the same indefinable stamp of something outside his experience. The hair of some, like that of Bosco and Murry, was shot with silver threads, but it wasn't that which made them seem almost alien to the officer. It was something about their eyes, the unconscious attitude of superiority and self-mastery so that, beside them, he felt as if he were a child. They stared at him, listening to Bosco's explanations, then together the assembled party continued down the icy corridor.

It grew colder as they went on but the gravity remained the same and Jay knew that they were progressing along one of the communicating tubes running beside No-Weight. They had walked a long way and Jay was numb and George blue with the cold when Bosco halted before a door.

"Don't touch anything you may see out there." He gestured to beyond the panel. "The rest know about it, but you're new. Remember, don't touch anything."

He snapped off the light as he swung open the panel and Jay blinked to a flood of light.

It came from one end of a vast chamber. A wash of brilliance almost too great for eyes accustomed to the dimness of the corridor but, as Jay blinked and stared, he could see a multitude of brilliant points against a background darker than the shorts he wore.

"They're moving," whispered George and his voice echoed his amazement. "Those lights are moving!"

They were. They moved from one side of the blackness down in a smooth arc to disappear at the other, others taking their place in continual procession as they passed across the darkness. To George it was the strangest lighting system he had ever seen and to Jay it was inexplicable. He turned as Bosco touched his arm.

"What is it?"

"That?" Bosco looked towards the glittering points. "Oh, they're stars."

"Stars!"

"That's right. You've heard of stars, haven't you?"

Jay had but only as a repeated lecture on one of the tapes and to him the word 'star' had nothing to do with reality. He stared at the screen, he couldn't think of it as other than a screen, and shrugged off Bosco's hand.

"Come on," said the man urgently. "We mustn't linger here. The very temperature of our bodies can affect the instruments." He began to diag Jay towards the far wall of the vast room. "Let's get moving before we freeze."

Reluctantly Jay turned and followed Bosco, his head riding on his shoulder as he stared back at the glittering display of the universe and, because of that and the numbness induced by the cold, he tripped and almost fell over a vat-like receptacle. It was one of many ranked in orderly rows across the floor and, as Jay caught at the edge to save himself he stared directly into the face of a dead man.

He rested beneath a sheet of some transparent material, still, immobile, the lips parted a trifle to reveal glistening teeth, the eyes closed and the body—a surprisingly undeveloped body to Jay's standards—naked and with a waxen pallidity.

Jay had heard of deep freeze, all the Ship's personnel had, but to him as to them deep freeze was where the animals and birds, the fish and insectivora lay against the time of their awakening at Journey's End. No one had ever dreamed that men too could lie in suspended animation. No one, that is, of the ordinary Ship's personnel and Jay's immediate assumption was that they must be dead.

He couldn't guess that here, in these ranked vats, rested the brains, technology and filtered information of a world three hundred years away in time and unguessable miles in space. Here were the ecologists, the atomic engineers, the rocket pilots, the geologists, mineralogists, all the other branches of science and experience impossible to either teach or practice in the Ship itself. They rested as they had rested ever since the Ship had left Earth, sleeping if it could be called that, waiting for the day when they would be awakened to help build a new Earth.

But to Jay they were all dead men.

He stared at Bosco as the man waited impatiently for him at the far side of the chamber, his eyes dull with non-understanding.

"What kept you so long?"

"Those men," stammered Jay. "I saw them."

"Well?"

"They're dead. All dead."

"What of it?" Bosco stared at Jay as he led the way into a corridor.

"Haven't you ever seen a dead man before?"

"Yes, but . . ." Jay swallowed, hardly noticing that it grew warmer as they walked down the passageway. "Why weren't they sent to the converters? Why keep them like that?"

"I don't know," said Bosco thoughtfully. "I've wondered about that myself. As far as I know there is only one man who could answer that."

"Who?"

"The man we are going to see. The Captain."

Jay was so numbed with repeated shocks that he didn't even feel surprised.

XVI.

The scene was a normal one of distant Earth, a farming scene with animals and crops, of machines and happy, busy men and women. Malick smiled as he saw it, leaning a little forward as he stared at the illuminated screen of the viewer. The children would be seeing the same educational tape, the small children barely able to understand, the older ones as a part of their normal education, even those nearing marriageable status. Remembrance of their planet of origin was an essential part of Ship indoctrination.

The scene changed as he watched, the harvesters climbing onto an animal-drawn vehicle, a horse Malick thought it was, and the images moved to portray the faces of those in enlarged close-up. The women, young, healthy, radiant with fitness and enjoyment. The men, also young, also fit, comfortable in their loose shirts and trousers. The driver . . .

Malick felt almost physically ill.

It was the shock of the unexpected which did it. The man was normal enough, two arms, two legs, two eyes and a head, but there was something about him which the Geneticist had never seen before.

White hair. Lined features. Gnarled hands.

The man was *old*.

The screen faded as Malick turned the switch and picked up his phone. "Gregson?"

"Speaking."

"Malick here. I've just seen a new tape. One relayed to the children."

"So?"

"So it shows an old man. Do you understand, Gregson? An old man!"

"How do you know?" There was irritated impatience in the chief of psych-police's voice. "Have you ever seen an old man?"

"Of course I have. Quentin is old, isn't he? Well, then, so was the man I saw pictured on the tape." Malick gripped the phone with sudden urgency. "Gregson! Don't you realise what this could mean?"

"Yes," said Gregson after a pause. "Yes, I see what you're getting at."

"It could ruin our social system," babbled Malick. "Once the children get used to the idea that a man is only old when he has white hair, lined features, and gnarled hands, then who's going to believe that they're old at forty when, in reality, they're in the prime of health?"

"You don't have to tell me what I already know," said Gregson coldly. "Is this the first time you've seen the tape?"

"Yes. I'd noticed something odd before, you remember, the tapes showing people slaughtering animals and eating meat. You laughed at me then, but this time you can't afford to laugh. What do you think will happen when the children grow up and begin asking questions?"

"Trouble," snapped Gregson curtly. "Look. Have you any witnesses to what you saw?"

"No. But I can find some. It's a certainty that one or more of the attendants would have watched the tapes. I'll find someone if you like."

"Do that. Find her and fetch her up to the Bridge."

"The Bridge?"

"That's right." Gregson sounded unnaturally grim. "This is a matter which has to be settled by the Captain."

"But . . . ?"

The voice died as Gregson replaced his handset. Merrill, lounging on the edge of the desk, looked curiously at his superior officer. "What was that all about?"

"My business." Gregson glared impatiently at the young man. "What are you doing here, anyway? I ordered every officer into No-Weight to conduct the search."

"The search is finished," said Merrill easily. "I've taken back the duelling knives you issued out to the men, and returned them to the stadiums. The men themselves have gone back to their work."

"Did you find them?"

"Who?"

"You know who I mean, Merrill. West and Curtway. Did you find them?"

"We found and eliminated seven people. Five women and two men." Merrill paused with calculated deliberation. "Jay and his friend were not amongst them."

"What?"

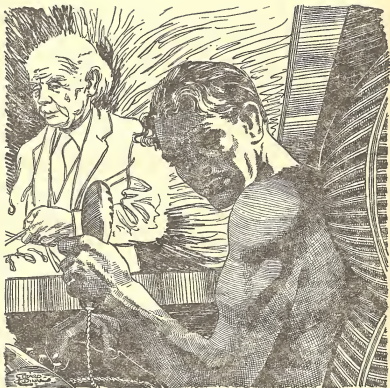
"We didn't find either of the two men you wanted."

"That's impossible! I watched Jay enter No-Weight and I know that Curtway was hiding there. Waste, Merrill! Are you telling me that you've fallen down on the job?"

"I'm telling you that we couldn't find people who weren't there to be found."

"Impossible!"

"Keep saying that," said Merrill contemptuously. "I tell you that we searched No-Weight from one end to the other and we eliminated everyone we found. Jay and Curtway weren't to be found, therefore



they couldn't have been in No-Weight." Merrill slipped from the edge of the desk and stared down at his chief. "To me that's simple logic—unless you want me to believe that they went invisible and slipped through solid metal."

"I can't understand it." Gregson stared suspiciously at the young officer, his hatred and fear of Merrill returning with renewed force. Merrill was getting to be dangerous. The man was ambitious, too ambitious, and now that Jay had let him down, Gregson knew that he would have to find a new weapon against Merrill, and fast. He gestured towards the door.

"Return to duty."

Merrill hesitated, wondering whether now would be the best time to eliminate his chief and so gain his coveted position. He could do

it so easily, next to him Gregson was an old man and long out of practice in the delicate art of killing a man with his bare hands. Memory of Quentin and his warning came just as he was about to reach for the other's throat. Sucking in his breath Merrill forced himself to control his emotions. He turned just as he reached the door.

"When are you going to see the Captain?"

"Why?"

"I thought that perhaps you'd like me to come with you." Merrill smiled with superior knowledge. "After all, as I conducted the search the Captain might like to have a first-hand report on what we found."

"I'll relay the report," snapped Gregson. He stared pointedly at the younger man. "Return to your duty and leave the thinking to me."

"Yes, sir," sneered Merrill. He made the title sound like an insult.

Gregson sighed as he stared at the closing door and, despite his iron calm, felt a mounting sense of danger. Jay and Curtway had escaped the search, a search for which he alone was responsible. The Barbs were dead, yes, but the death of seven people would hardly justify the arming of Ship personnel, taking them from their normal duties, and the power-loss caused by illuminating the entire area of No-Weight.

And Jay and Curtway were still alive.

Jay didn't matter, that is he hadn't mattered until now, but if Curtway had told him what he knew, and if Merrill had found them, listened to them, and hidden them somewhere waiting for his chance to take them to the Captain . . .

Gregson stared down at the surface of his desk and his face grew bleak as he visualised what must be the outcome of any such move. He shivered a little as if at a return of his recurrent dream, feeling in imagination the plastic bag of the men in olive, the sharp knives of the medical students, the final violation of the dreaded converters. All that would happen if they reached the Captain. But if he were the Captain . . .

Gregson reached for the phone, dialled a number, and waited impatiently for the connection to be made.

"Yes?"

"Gregson here. Conway?"

"That's right." Anxiety sharpened the psychologist's voice.

"Anything wrong?"

"Plenty. Too many people know too much. Curtway for one."

"But you told me that he was dead."

"I thought that he was, but he isn't. Never mind that now." Gregson glanced towards the door and lowered his voice. "Listen. Psycho must eject the cards of Jay West, got that?"

"Jay West, yes?"

"And Merrill. Both psych-police officers. You have their numbers on file. I want those men slated for elimination and the sooner you have their cards ejected the better. Can you do it now?"

"Now?" Conway sounded troubled. "I don't know. It won't be as simple as last time. You want me to locate those cards, alter them or the master plate so that they will fail to meet specifications, and return the machine to normal."

"Feed in the following data," snapped Gregson. "Both are guilty of inefficiency in that both have aroused suspicion through careless work. Merrill has delusions of grandeur, Jay paranoia. Waste, Conway! This is important! Can you do it or can't you?"

"I'll try." Conway didn't sound too hopeful. "Why, Gregson, is something wrong?"

"Yes." Gregson paused, letting the tension of the psychologist mount, then spoke again with sharp urgency. "Curtway knows what we've done. Jay West knows it too, and I think that Merrill has a suspicion. All of them want to reach the Captain." He paused again. "You know what will happen if they do."

"I can guess." Conway sounded as though he wanted to be sick. "You'll protect me, Gregson?"

"I'm busy protecting myself." Gregson bared his teeth as he guessed the result of his words on the nervous psychologist. "Listen. There's only one way now in which we can save ourselves. What the Captain learns doesn't matter—if I am the Captain. Well?"

"Not mutiny," said Conway weakly. "I won't stand for mutiny."

"Then can you get me the cards? I daren't eliminate Merrill unless I have official orders, and even if I do there's still the others to worry about."

"Can't you eliminate them as well?"

"Yes, if I can find them." Gregson gripped the receiver until his knuckles showed white beneath the skin, cursing the psychologist for his nervous reluctance. "I can't order eliminations without orders from Psycho. You fixed Curtway's card, why can't you fix the others?"

"Curtway was an old man and due for elimination anyway. All I had to do was feed in a little false data. But the others are different. Both are young, officers, and are assumed to be stable." Conway hesitated. "Can you give me three shifts?"

"No."

"Two then, I can't do it in less."

"Then forget it," snarled Gregson furiously. "Wait until Quentin sends for you." Gregson swore again. "Waste! I've no time for a man who is too timid to save his own skin."

"No." Conway gulped, his voice echoing against Gregson's ear. "I'll help you. What do you want me to do?"

"Meet me in the Bridge. Wait for me if you have to, spin Quentin some tale of being worried about Psycho, anything, but do nothing until I get there. Nothing, understand?"

"Yes, but . . ."

Gregson hung up before Conway could ask further questions. The man was a weakling, a cog in a machine, terrified of his own imagination and the fear of losing his life. Gregson had recognised that fear and had played on it for his own ends. He despised Conway and yet, at the same time knew that the man was not wholly to blame. He was the end product of generations of selective breeding. A selective breeding which had produced a type of human directly opposed to the stringent needs of the Ship.

But he was the only one on whom, at the moment, Gregson could rely.

He sat motionless at his desk, his face heavy with thought as he tried to foresee the future. Quentin must die. That part wouldn't be difficult; the Captain was an old man and would probably collapse at the first pressure on the carotids. Conway would be willing to swear that the death had been from natural causes and, with his backing, Gregson could take over. Merrill would be quietened by promotion to the office of chief of psych-police. Quietened long enough, that is, until the new Captain could arrange his elimination. Conway would have to go as well, the rest of the Council wouldn't argue, and then he could rule for as long as he managed to stave off natural death.

Gregson sighed as he thought about it, feeling some of the tension leave him now that he had a concrete plan, then glanced up in annoyance as a man burst into the inner office.

"Henderley! What's the matter?"

"This is terrible," gasped the Chief of Medical. "I've run all the way here from the wards. Gregson! We've got to see the Captain."

"I know. Malick phoned me and told me about it. I'm meeting him in the Bridge."

"Malick?" Henderley blinked. "How did he know? I've come straight down from Medical and haven't told anyone yet."

"He saw the tapes," explained Gregson. "Something about old, white-haired men being shown on the children's viewers." He stared at Henderley. "That's what you were talking about, wasn't it?"

"No." Henderley dismissed the subject as unimportant against his own news. "It's worse than that. I've a patient in maternity, a woman, pregnant!"

"Have you?" Despite his own worries Gregson smiled. "Is pregnancy so rare then?"

"Of course not, but I've never known a case like this before." He stared at Gregson. "You don't understand. This is an old woman, one out of marriageable status. She's twenty-six years of age—and she's going to have a baby!"

Henderley sat down as if stunned by the repetition of the fact.

XVII.

The Bridge was crowded when Gregson arrived with Henderley. Quentin sat, as he always sat, at the head of his desk while before him Malick, Folden, Conway and a young girl wearing the pink shorts and halter of maternity sat uncomfortably on chairs. The Captain nodded as Gregson entered the room, motioning both he and the Medical officer to vacant seats.

"I'm glad you saw fit to come, Gregson. It appears as if we are going to have a full scale Council meeting."

"Are we?" Gregson looked pointedly at the girl. "Is it normal procedure to allow Ship's personnel to sit in Council?"

"Susan Curtway's my witness," snapped Malick pettishly. "She saw the tapes and will back up what I have to say." He looked at the Captain. "You laughed at me before but this time you'll have to admit that I'm right. Those tapes must be stopped."

"Indeed?" Quentin didn't shrug but the tone of his voice left no doubt as to how he felt. He looked at Henderley. "I already know why you are here. You have a patient, a female, who is expecting a baby. Correct?"

"She is twenty-six years of age and should be barren." Henderley sounded as if he still couldn't believe it. "You know as well as I do that all females are passed through the sterilizer when they reach twenty-five, or sooner depending on the number of children they have."

"Perhaps she missed the sterilizer," suggested Folden. Henderley snorted.

"Impossible! Her case history shows that she was exposed to the radiations at the correct time. My department is not at fault in this matter." He glared at Conway. "If you want my opinion I'd say that the root of the trouble lies with Psycho. Malick and his tapes—and we know that Psycho issues the educational tapes on relayed channels—proves that something must be wrong."

"It proves nothing except your own incompetence," stormed the psychologist. "The Builders determined which tapes were to be shown when and there's nothing I can do to alter the settings. As for that woman," he glared at Henderley, "the mere fact that she's having a baby proves that she couldn't have been exposed to the sterility-inducing radiations as you claim. If she had then she wouldn't be pregnant."

"Are you doubting my word?" Anger flushed the medical officer's cheeks with red.

"I'm stating facts," snapped Conway. He appealed to the Captain. "You know that there's nothing wrong with Psycho, don't you?"

"I trust the Builders," said Quentin enigmatically. He looked at Gregson. "I don't recall giving you orders to search No-Weight. Why did you do so?"

"I thought it time something was done to eliminate the Barbs." Gregson was annoyed to find so many people with the Captain. Their presence made his plans of assassination impossible to execute and he had a sickening impression of time running out on him. "I took it on myself to sweep out the vermin."

"Were you successful?"

"Seven dead."

"I see." Quentin stared thoughtfully at the chief of psych-police and Gregson had the impression that the old man was laughing at him. "And yet you failed, didn't you? You didn't eliminate the people the whole search was to find." He smiled outright at Gregson's stunned expression. "Don't look so amazed. Surely you didn't think that the Captain of the Ship was just a nominal figurehead?"

Gregson bit his lip, quickly revising his opinion of the old man. Quentin knew! He knew too much and, as he thought about it, Gregson felt a sudden fear that he might know far more than anyone had ever given him credit for. Merrill could have told him about the search, probably had, but what else had others told him? He forced himself to listen to the thin, penetrating tones as the Captain spoke.

"First, in order to allay your fears, there is nothing wrong with Psycho. You have become so used to depending on the machine that anything out of your ordinary experience is beyond your comprehension. What you have forgotten, all of you, is that Psycho is a machine built for a specific purpose. It was built more than three hundred years ago and the men who built it built well."

"I have never doubted it," said Conway quickly. "It's the others who mistrust Psycho." He glared at Malick and Henderley.

"And they are right to do so." Quentin stared the psychologist into silence. "Blind trust in the work of others can be dangerous. The Builders were not omnipotent but, aside from some tampering, the machine which we know as Psycho has operated perfectly. It is still operating perfectly."

"You said that Psycho had been tampered with," said Gregson thickly. "Was that an accusation?"

"No. It is a fact."

"Who?" Conway stared up, his face livid with fear. "Who has dared to touch Psycho?"

"Do you really want me to answer that, Conway?" The Captain spoke to the psychologist but his eyes never left Gregson. "Shall we say that certain men, terrified of death, had the brilliant idea of adjusting their cards so that they could not be ejected from Psycho? Shall we say that, Gregson?"

"Why ask me?" Gregson stared at the old man and felt the sweat of apprehension moisten his forehead. Quentin *knew*. Merrill? He doubted it, the officer couldn't have known all the details, but if he had caught Curtway and the electronics man had told him what he had discovered . . .

Gregson snarled, an animal-like sound coming from deep within his throat and his hands, as he sat hunched in the chair, hooked as if of their own volition into claws. Quentin knew. Therefore, in order that he could remain alive, Quentin must die.

"Merrill!"

Gregson paid no attention to the command rapped in the thin voice. Years of indoctrination fought against his survival instinct as he tried to throw himself towards the old man. Quentin was dangerous to his existence. Quentin must die. But Quentin was the Captain and to attack him would be mutiny. Gregson had been conditioned against even the thought of mutiny all his life and now, when he wanted to break that conditioning, he found himself impotent to do so.

Suddenly Merrill was beside him. Whether the officer had been there all the time or whether he had stepped from some hidden room. Gregson didn't know. Hatred for the officer and what he represented burst in his tormented brain. Merrill threatened him. Merrill had to die.

Gregson snarled again as he lunged for the other's exposed throat.

Quentin watched then as they struggled, his face impassive, his fingers resting lightly on a row of buttons set flush with the surface of his desk. He pressed one, a panel slid aside, and Jay together with Curtway and the remaining Barbs entered the room.

"Separate them."

Bosco grunted as he grabbed at Merrill and Murry caught Gregson's arms and held the man until he grew calm.

"You will seat yourselves," ordered Quentin drily. "If you wish to continue the battle you may do so in the proper quarter. The stadium is the place for duelling, not the Bridge."

"I wasn't duelling," snapped Merrill. He sneered as he looked towards Gregson, slumped now, numbed with the knowledge of his own defeat. "Do I get his job?"

"No."

"Why not? You promised me . . ."

"I promised nothing." The whip-lash of the Captain's voice echoed around the crowded room. "If children assume too much, must I be to blame? For that's what you are, all of you. Children. Stupid, blind, ignorant children." The scorn and contempt in his voice lashed them to silence and they sat, like the children he had called them, listening to his next words.

"You come running to me with your petty fears and yet, all the time, the facts are before your very eyes. You plot and scheme to extend your lives, even," Quentin glanced towards Gregson, "toy with ambitions of the—to you—ultimate power, and yet none of you has the sense or understanding to realise that, to me, all this is an old, old story. I have sat here and studied you all before. Not you, but others exactly like you. Men, lifted to a temporary power, struggling to extend that power and establish themselves as rulers of the Ship. Always I have beaten them. I always will because, to me, you are as transparent as glass, your motives childishly simple.

"Gregson wants to live, and who can blame him? Not I. Not Malick whose breeding for a high survival factor is directly responsible for that laudable ambition. Conway is weak but agreed to help for mutual benefit. Merrill is ambitious and, if I was fool enough to give him Gregson's position, would be plotting against me within five years. Curtway, a good man, honest, and yet unable to see further than his nose. Henderley, a doctor, and yet a man who, like Malick, worships a machine. Jay West, one of the new generation. A man able to think and to make his own decisions, and yet even he doesn't know why." Quentin paused and looked at the faces before him.

"It is not your fault. It is not the fault of anyone. The Builders of the Ship decided, and rightly, that we must concentrate on youth at the expense of age. We have had to forge a new race, strong, moral, adventurous, to get rid of hereditary disease and physical weakness. In the Ship a man is assumed to be old at forty. In the Ship a man is old at forty. Psychological training and indoctrination have seen to

that. But it is wrong. At forty a man is in his mental and physical prime with generations of life still ahead. But no man at forty, within the Ship at least, can ever be wholly mature. That is why the Ship has a Captain."

"You're old," muttered Gregson and his eyes, as he stared at the man behind the desk, held a sick envy.

"I am old," agreed Quentin. "The Builders knew that not all men could be allowed to die at forty. Someone had to live, to span the generations, in order to promulgate a time-binding, long-term policy without which the Ship would have degenerated into a rabble of self-seekers. That is why there is a Captain. Not as a nominal figurehead. Not as a symbol nor as the ultimate power. But so that he can sit and watch, live and plan, not for one generation but for others yet to come."

"You're old," repeated Gregson. He didn't seem to have heard what the Captain had said. "How old?"

"There have been four Captains since this vessel left Earth," said Quentin. "The first died at sixty years of age. The second at eighty-five. The third Captain lived for a hundred and twenty-five years." He paused, staring at their wondering expressions. "I am over one hundred and fifty years of age."

"Impossible!" Henderley broke the silence. "No man can live that long."

"No?" Quentin turned to look at the doctor. "Why not?"

"He begins to break down," stammered Henderley. "His katabolism increases above his anabolism. His mind begins to get erratic. Toxins . . . body distortions . . ." His voice trailed into silence.

"How do you know that?" Quentin stared interestedly at the doctor. "How do you know just when all this breakdown and senility is supposed to occur? Have you ever dissected an old man? Have you ever seen one, other than myself? Do I look as though I am in senile decay?"

"No, of course not, but . . ."

"But, of course, you are only repeating what you have learned from the educational tapes." Quentin nodded as if speaking to a child. "Remember this. On Earth the normal life expectancy of a man or woman at the time of building the Ship was eighty years. Most people remained quite active until they were seventy, few suffered from any serious mental decay, and most remained working almost until their death. Eighty years, gentlemen. Double the normal life expectancy on the Ship."

"But a hundred and fifty! It's incredible!"

"Why? There are no diseases on the Ship. The diet is optimum for human consumption. The temperature is regulated to within half

a degree. I was born as we all were born, in a gravity double that of Earth, and I have spent most of my life near No-Weight. No strain, Henderley. No heart-trouble, anxiety, neurosis, psychosomatic ills or worry at earning a living. I started life with a perfect body and have lived in a perfect environment. Why shouldn't I live to be a hundred and fifty?"

"But the Barbs," interrupted Jay. "We saw one who was senile, or insane and I assume that's the same thing, at seventy." He looked at Bosco. "Joe—remember him? You said that he'd lived in No-Weight for thirty years."

"In darkness," said Quentin. "With little water, scarce food, constant fear and endless torment. Those are the things which age a man, West. Once the mind goes the body soon follows. The Barbs are not a good example."

"They should be exterminated," snapped Gregson. He seemed to have recovered himself for he looked at the strangers with undisguised detestation. "Eliminate them."

"Why?" Quentin seemed genuinely interested in learning the reason. "The Barbs are valuable in that they have the highest survival factor of all the Ship's personnel. They want to live so desperately that they deliberately chose the hell of No-Weight to elimination. I have fed them as best I could, contacted them, helped them in small ways. I . . ."

"You fed them!" Gregson half-rose to his feet then slumped as Merrill stepped towards him. "You?"

"Yes. Who else on the Ship could I trust? Who else would obey me implicitly without question and without thought of self-gain. The Barbs were valuable to me because they were the ultimate weapon against any who tried to overthrow me." Quentin smiled at the discomforted chief of psych-police. "Call them my private army if you wish, but I prefer to think of them as some of the finest elements in the Ship."

"That accounts for why you vetoed the suggestions for eliminating them," said Malick. He nodded his head. "Of course, high survival factor, it all makes sense. But what about the tapes?"

"And that pregnant woman," said Henderley.

"Those bodies I saw in the sealed areas." Jay flushed as Quentin stared at him. "What about those?"

"Three questions," said Quentin, "and all with the same answer. Folden knows the answer already, but how many of you have guessed at the obvious?" His eyes travelled from face to face. "None? Not even you, Conway? Haven't you wondered why there have been no new cards expelled from Psycho even though many of the personnel must have reached forty during the past few shifts? No?"

"May I tell them," said Folden. The Chief of Supply stepped forward, his face eager. Quentin lifted one of his thin, delicate-seeming hands.

"You may tell them what you told me, no more. I am interested in gauging the depth of their intelligence."

"The position as regards supply is serious." There was an unusual importance in Folden's voice as he spoke. "As you all know, or should know, there can be no such thing as a perfectly balanced ecology in a closed-cycle system the size of the Ship. The very energy used in the effort of walking, for example, means energy lost. We can reclaim almost all of the water, almost all the oxygen, and nearly all of the chemicals used. You will note that I say 'almost.' There is bound to be some wastage and our reclamation units are not one hundred per cent efficient. In effect then, we started with a certain amount of essential supplies on which we have had to draw to maintain our ecology." He paused, enjoying his moment. "At the present rate of consumption those supplies will be exhausted by the end of the seventeenth generation."

"Twenty-three years," said Henderley. "But . . ."

"Please." Quentin silenced the Chief of Medical. "Have any of you guessed what this information means?" He waited a moment then spoke with a trace of asperity. "Think of it. Psycho ejects no cards and so the older personnel remain alive. We trust the Builders implicitly and so Psycho cannot be wrong. A woman is carrying a child, a woman who is assumed to be sterile. Obviously the sterility-inducing radiations have been cut-off, and so we are going to have a tremendous increase in the birth rate. And yet, with the Ship personnel mounting by non-elimination plus increased birth rate, we know that our supplies will last no more than a few years." He stared at them, something of his emotion breaking through his studied calm.

"Three hundred and seventeen years ago the Ship was launched from Earth and aimed towards Pollux and a new planetary system. You have forgotten that. You have overlooked the fact that every journey, no matter how long, must eventually end." He smiled at their dawning comprehension.

"Yes, gentlemen. Every fact in our possession leads to but one conclusion. The Journey is over. We have arrived!"

XVIII.

The Ship was in a turmoil. Everywhere men and women, children too, gathered around the hastily adapted screens and stared at the black star-shot night of space dominated by the glowing luminosity of Pollux. Fully twenty-eight times as bright as the Sun they had never seen, the lambent ball dominated their area of space, and speculation ran high as to just when they would be able to land on an habitable planet and escape the confines of the Ship.

Quentin knew that wouldn't be soon.

He sat in the chair behind the desk and controlled the running of the Ship as he had done for the past century and a half. He was glad that he had lived to see Journey's End, glad too that now the necessity for eliminating strong, healthy men and women was over and done with. He smiled as Jay and Malick entered the room.

"Everything going to plan?"

"Yes." Malick was almost beside himself with excitement. "The Builders thought of everything. I've been in the scaled areas examining the animals and seeds in deep freeze." He sobered. "The men and women too. I hope that they survive."

"They'd better," said Quentin grimly. "There's no one else capable of operating the investigation ships. Tuition in the handling and care of rocket exploration craft is something which, obviously, couldn't be done by means of educational tapes. We need those crews in deep freeze."

"We need them for more than that," said Malick. "The cross-strains will be the making of our race." He smiled at the Captain. "Sorry, but I can't forget my own particular field."

"You must never forget it. Genetics is something we must always practice. It is the only way in which we can save what we have won during the past sixteen generations." Quentin smiled at Jay's blank expression. "Tell him, Malick."

"Inbreeding is dangerous," explained the geneticist. "I've already told the Captain that we were approaching the breaking point by our insistence on highly-strung, intelligent, people with a strong survival instinct. People like that can't live without space to move around in. And, aside from that, there is another good reason why we must have an influx of new germ plasm." Malick settled back in his chair, seeming to forget that the Captain knew all that he was about to say.

"To get a strong race you first have to breed out all the weaknesses. You do it by inbreeding until the end product is dangerously near breakdown point either through, as in our case, extreme nervous tension, or through sterility. The remaining specimens are strong

because, unless they were, they wouldn't be alive. You then cross-breed them from external stock and the results are amazing." Malick frowned. "At least they were with plants and animals—I only hope that they will be with men and women."

"They will be," promised Quentin. "A man is basically an animal" He looked at Jay. "Did you understand all that?"

"I think so." Jay frowned. "What I can't understand is why, if the Builders had perfected suspended animation, they had to have personnel at all. Why not staff the Ship with men and women in deep-freeze, send off the Ship, and let them waken when they had arrived?"

"A good question." Quentin nodded as if pleased. "First, there are two ways by which men can reach the stars. One is by suspended animation as you have suggested, the other is by generation ship, which this is. We have combined both and so avoided the weaknesses inherent in either. The generation ship depends on new blood replacing the old but the danger is that the new blood will forget what it should remember. Sixteen generations is a long time Jay. Even with continual use of educational tapes it is still hard for some people to accept the fact that the Ship is nothing but a metal can drifting in the void. To them the Ship is the universe and they just can't imagine anything possibly being bigger.

"The Deep-freeze method is just as bad. Then the personnel have to rely wholly on automatic machinery, even as we do, but they are far more vulnerable than a generation ship could ever be. And there is another thing. We still aren't certain that they will be fertile after deep-freeze. The animals are, the men and women should be, but no one has ever rested in suspended animation for more than three hundred years before. It was a chance we dared not take."

"I see." Jay sat, thinking about it, trying to grasp the vast concept of which he was a part. Malick broke into his musings.

"There is another point, Jay. The people who are put to sleep on Earth and wake to find themselves on a new world, aren't really able to settle down. To them their home is Earth and, human nature being what it is, they would suffer from nostalgia. They would get homesick, long for all the things they had left behind. We can't do that. We have never known any home other than the Ship and most of us are dying to get away from it."

"Yes," said Jay. He was thinking of Gregson. He put the thought into words.

"Gregson?" Quentin shrugged. "He'll be no problem now. The pressure driving him has lifted. Once he was relieved of his morbid fear of death he reverted to normal. Now he is just as eager to

explore a new planet as Merrill is." The Captain chuckled as he stared at the young man. "You're surprised that I let them live? Why should you be? We need men *now*, Jay. Grown men who have the essential drive necessary to take a planet and twist it to our requirements. I can't afford to let what is past interfere with the main project. Merrill, Gregson, the Barbs all have their responsibilities. They know it and, knowing it, can forget small, petty grievances. After all, Jay, we bred for intelligence and intelligent men don't waste energy on trifles. They'll have plenty to occupy their time soon."

Soon! Quentin sighed as he thought of it. First the arousing of the rocket crews from their suspended animation. Then three long years while the Ship orbited around the central sun. Exploration of the thirteen planets discovered by the Luna Observatories so long ago and the final testing of their theory that those planets must present a high probability of being habitable.

Then the work. The endless shuttling from the Ship down to the selected world and back again. The tests for bacteria and alien life forms. The planting of men and women as if they were seeds to see if they could survive and multiply. The isolation of the test colonies until all danger of harmful bacteria, unknown viruses and threatening ecologies had been decided. The careful cross-breeding to gain the best from the two almost totally different races now aboard the Ship. The living personnel could be allowed to mate with whom they liked, they had already been weeded and purified in order to meet alien conditions, but the men and women in deep freeze presented a problem. They were relatively weak, still used to a single Earth gravity, still carrying within themselves hereditary diseases and slow reflexes.

Five years? Ten? A full generation? Quentin didn't know but, as he thought about it, he wished that he were a younger man. There was life and excitement and adventure ahead. Monotony and dullness and the careful fitting in of living people to the dictates of automatic machinery were all behind. It was work for a younger man, a fit, virile, eager man who would be willing to be taught and guided in the path he should take. Jay West?

Jay flushed as he felt the old man's eyes on him. He still had to fight against his inclination to stare, to wonder how any man could have lived so long, to marvel at the greying hair, the thin hands, the sunken lines on cheeks and at the corners of the eyes. He wondered if he would look like that when old.

Not that it would matter then. The children were being taught that men changed as they grew old and that the change was normal and nothing to be frightened or disgusted about. Still, it would be odd to see old, white-haired men and women.

"You may as well end-shift now, Jay." Quentin relaxed in his chair, his mind made up. "It is one of the prerogatives of the Captain to choose his own successor. I will put it to the Council as a matter of courtesy, but there will be no doubt as to their reactions." Quentin rose in dismissal and held out his hand, a gesture Jay had never seen before. He stared at the extended palm.

"It is an old custom," explained Quentin. "You may have seen it on the tapes, and then again you may have forgotten. I understand that now the tapes do include it as normal education. The idea is that you take my hand in yours, shake it, and then let it fall. The reason for the gesture is to assure you that I am your friend."

"I see." Jay took the proffered hand, shook it awkwardly, then let it fall. "Like that?"

"I think so." Quentin smiled. "I have only ever shaken hands once in my life before. That was when my predecessor informed me that I was to follow his command. I thought it a good custom and decided to use it to signify my own choice."

"Captain?" Jay blinked, still only half-aware of the implications of what Quentin had said.

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"Yes. You will receive instructions from both the Council and myself. Also there are special tapes containing private instructions for the commander. I will show you those myself." Quentin smiled. "I must warn you not to be too impatient. The instruction is long and I have no intention of going to the converters just yet. You might be waiting for my command for ten years, maybe longer, but you'll be learning every moment of each shift." He sobered as he dropped his hand on the young man's shoulder. "The responsibility is a heavy one, more now than when I took command, but you are young and adaptable and I know that you will do the best you can."

"Yes, sir," said Jay. He felt peculiarly humble. "Thank you."

He felt as if he were walking on air as he left the Bridge. The feeling lasted as he strode down the whispering corridors and into sector five. Then, as he saw a figure before him, he faltered with sudden doubt.

"Hello, Jay." Susan came up to him, smiling, and slipped her arm through his. "Father has told me everything. I was a fool ever to have doubted you."

"Susan!"

"I never really believed what you said. I'm a woman, Jay, and a woman knows when a man is in love with her." She smiled up at him, her eyes warm with a woman's knowledge. "Did you hear the news? Genetics has given permission for free-choice marriages." She paused, hopefully, and then shook his arm in sudden impatience. "Jay! Didn't you hear what I said?"

"Yes," lied Jay. He was still thinking of what Quentin had told him in the Bridge. "It'll take about five years."

"What will take five years?"

"Contacting the planets."

"Who cares about the planets?" Susan clung to his arm. "You didn't hear what I said. Genetics has given permission for free-choice marriages for anyone who has reached marriageable status." She looked slyly up at him. "Well?"

"Good," he said then, as what she hinted came home to him, he stopped, gripped her shoulders and turned her to face him.

"Susan!"

"I knew that you'd want to marry me," she said. "That's why I've already filed application for the lowering of my status age. We can be married next month."

Her kiss stopped his protest and, as he responded to it, he gave up.

Between Quentin and Susan his life was pretty well planned for him as it was.

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